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Vol. XLII **October, 1946** **No. 6**

DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION AND PUBLIC HEALTH IN TEXAS

Our "Must" Legislative Program for next year has been rather definitely determined. So, also has our legislative program in general. However, the must phase of the program only will be discussed at this time. There may be changes in the rest of the program before long, and all of the measures in which we are interested may be discussed later on.

It should be understood that when the State Medical Association goes to the Legislature with a legislative program, it will expect to either carry the ball or run interference. It will carry the ball for those measures which it considers strictly and directly, if not exclusively, the concern of the medical profession of Texas as represented by the State Medical Association. There are a number of organizations in the State concerned with the health of our people, and anxious to do something in a legislative way to better such conditions, such as, for instance, the Texas Tuberculosis Association, the State Board of Health, and the sponsors of the Dallas Psychopathic Hospital, to name several, and we have approved the legislative programs of these organizations, and even the bills that they will introduce. We will not carry the ball for them, but we will run interference, so long as by so doing we do not mess up our own game.

While not strictly a matter of public health legislation, the pending Constitutional Amendment which requires that motor vehicle registration fees and gasoline taxes be used exclusively for road construction purposes, except the one-fourth of the gasoline tax allotted to the available school fund, has been approved by our Executive Council. It is clear that practicing physicians, particularly those in rural areas, are directly interested in good roads and anxious that tax money coming in from gasoline, vehicle licensure and the like, be devoted to the development of good roads, except that portion allotted to the available school fund.

It is clear that if all of the organizations sponsoring public health measures at the same time carry the ball and run interference for each other, wires will get crossed and confusion will obtain. Not only that, but opposition to any of the measures concerned will have a much better opportunity to swap out on us than if each organization manages its own legislative strategy and tactics.

We call attention at this time to the proposed Basic Science Bill and Revision to the Medical Practice Act—the "must" legislative program of the State Medical Association for the forthcoming session of the State Legislature. A brief discussion of the two bills follows:

The Basic Science bill and the bill Revising the Medical Practice Act, are necessarily companion pieces and should be considered together. They will be introduced separately, the Basic Science bill first, and the Medical Practice Act Revision bill almost immediately thereafter. If the Basic Science bill is not enacted into law, the proposed revision of the Medical Practice Act would hardly suffice on its own, because of the omission therefrom of the basic science subjects. How-

ever, if the Basic Science bill is passed, and the Medical Practice Act Revision measure not enacted into law, there will be some confusion, but the Basic Science law can be used in connection with the present Medical Practice Act. There will be duplication in the matter of examinations in that the basic science subjects will still be included in the Medical Practice Act. These and other conflicting parts of the two measures can, of course, be adjusted later on, perhaps in a subsequent Legislature.

It is important to remember in connection with the proposed revamping of our medical licensure procedures, that the Constitution of the State of Texas will not permit setting up separate standards for the separate schools of medicine, for the reason that thus discrimination as between schools will certainly be established. It is this constitutional provision that has saved the public health of Texas the imposition of cult licensure without educational safeguards. The question might well be asked, then, how will the proposed procedure be made to accord with the State Constitution. It is proposed that an examination in the basic sciences by a Board of educators who are in no way connected with the practice of medicine, be exacted of all who would practice any branch of the healing art, and that examinations then be given by those branches of the healing art which desire to perpetuate their scope, limitations and practices, the examinations in each instance to be given by examining boards composed of practitioners of the branch of the healing art concerned. Thus it would seem that the Basic Science Law, applied to all alike, sets up a standard which cannot be construed as in any way discriminating as between the so-called schools of medicine. It would seem that the Practice Act of each of the schools of medicine, or branches of the healing art, will be setting up standards for their own use, in their own method of practice, and in accordance with the teachings of their own colleges. It is believed that this procedure is not in contravention of the much discussed constitutional requirement that in the enactment of laws controlling the practice of medicine there shall be no discrimination as between schools of medicine.

The Basic Science Bill now believed to be ready for introduction in the Legislature, is a revision in quite a few important particulars of the Basic Science bill which was introduced in the last session of the Legislature and which failed of passage. While these changes are important, none of them are basic. They merely tend to make a finished product of the measure, and it is believed that it is now as nearly suited to our needs as it can be made. To begin with, the first version of this measure included the best features of the several existing basic science laws in the country, fitted together to meet our requirements. The changes that have been made have been carefully considered from the legal, medical and public health angles, and all implications and ramifications followed through to their final application. The new bill has been put in type in the style and form used by the Legislature, with numbered pages and numbered lines. Copies of the bill in ample numbers will be furnished county society legislative committees, and others interested in the passage of the measure, in order that suggestions may be made as to changes, line by line. The State Association Legislative Committee will give careful consideration to all such suggestions. County society legislative committees will see that their respective legislators receive copies of the bill, and that they understand it. Thus no member of the Legislature will go to Austin with the wrong conception of what their doctors want done with respect to this part of the problem of medical licensure.

It is hardly feasible to give an analysis of the Basic Science bill here, but a few facts should be pointed out at this time. No person will be permitted to take an examination for a license to practice any healing art without receiving from the Basic Science Board a certificate of proficiency in six so-called basic sciences, namely, anatomy, physiology, chemistry, bacteriology, pathology, and hygiene and public health.

The healing art includes any system, treatment, operation, diagnosis, prescription or practice for the ascertainment, cure, relief, palliation, adjustment or correction of any human disease, ailment, deformity, injury or unhealthy or abnormal physical or mental condition.

The Board of Examiners in the Basic Sciences will consist of six members appointed by the Governor, and selected because of their knowledge of the basic sciences named in the act. Each member of the board will be a professor, or an assistant or associate professor on the faculty of one of the first class universities or colleges in the State, no member of which shall be actively engaged in the practice of the healing art or any branch thereof.

The members of the Board will be paid a per diem of $10.00. The fee for the examination will be $15.00, with a $10.00 fee for re-examination within a period of twelve months. The per diem and other expenses of the Board will be paid from these fees.

The examinee must be a citizen of the

United States; not less than nineteen years of age; of good moral character, and a graduate of an accredited High School.

The Basic Science Board will recognize certificates from basic science boards of other states having the same standards as ours.

Any person who practices the healing art or any branch thereof without having obtained a valid certificate from the Basic science Board may be fined or imprisoned, or both, not for violating the Medical Practice Act, but for violating the Basic Science Act. No Board of Examiners may examine any person who does not hold a certificate of proficiency in the basic sciences, issued by the Basic Science Board.

No provision of the Basic Science Act may be construed as repealing any statutory provision in force at the time of its passage with reference to the requirements governing the issuance of licenses to practice the healing art.

The bill carries what is believed to be a very effective injunction feature.

The New Medical Practice Act, according to the bill approved by the Legislative Committee and the Executive Council, and now ready for introduction in the Legislature will, in effect, be the Medical Practice Act for the unlimited practice of medicine. The idea is that each branch of the healing art which desires to regulate its own practices will set up a Practice Act accordingly, regulating its scope and limitations. Whether any particular branch of the healing art will be recognized by the State, and allowed to set up its own rules and regulations will, and must be the responsibility of the Legislature. Manifestly, and it goes without the saying, a Practice Act for a limited branch of the healing art which would give the practitioners of that branch unlimited privileges in practice perhaps not taught in that school, would be an infringement on the unlimited Medical Practice Act, and certainly not at all logical. Whether or not anybody does anything about this phase of the problem remains to be seen. The best the Legislature can do is to set up laws which are consistent with a general plan which is fully protective of the public health as it relates to the practice of medicine or the healing arts, and provide suitable penalties for violation of such laws. It is hoped that at least this will happen.

The changes in the present Medical Practice Act are many and important. We cannot enumerate all of them, or discuss any of them at length.

The definition of the practice of medicine, which has withstood attack since the present Medical Practice Act was enacted in 1907, will be changed so as to add "to diagnose or offer to diagnose disease" in addition to treat or offer to treat the same.

The Board of Medical Examiners shall consist of six members rather than twelve, and all of them graduates in medicine from Class A Medical Colleges.

The Board will be required to equip and maintain a suitable office of record, and employ a Secretary at a salary of not less than $2,400.00 per year, with such clerical assistance as may be necessary. The expenses of the office and of the clerical staff will be paid from the fees received by the Board in examining applicants and issuing reciprocity licenses.

The present Annual Registration Law will be repealed, and there will be set up instead, in the office of the Secretary of the Board, a "Register," which will be prima facie evidence of all matters contained therein. The Secretary of the Board will file with the Secretary of State, for permanent record, a certified copy of this Register once each year. It is hoped and expected that this procedure will compensate for the present Annual Registration law, which, as stated above, will be repealed.

The same educational standards and safeguards existing in the present Medical Practice Act are perpetuated in the new version.

Applicants to be eligible for examination must be citizens of the United States, of good moral character, and must have completed the same courses of study called for in the present Medical Practice Act, and must hold certificates from the Texas Basic Science Board. The definition of a reputable medical school is the same as before, and must be classified by the Board as at the present time. In making its classification, the Board may act upon any evidence it believes to be satisfactory, and may appoint agents to determine any necessary facts or information.

The exemptions carried by the present Medical Practice Act will be named in the new Act, plus practitioners of branches of the healing art known at the present time to be interested in securing Practice Acts of their own, including the osteopathic and chiropractic groups. As additional Practice Acts are set up, it will be necessary to include in all of them exemptions of all of the others.

Reciprocity is provided for as at the present time, except that certificates from the Texas Basic Science Board are also required.

As at the present time, the Board may refuse to issue licenses to persons known to have procured their medical credentials

illegally or fraudulently; any who have been convicted of a crime of the grade of felony, or any of several crimes named in the act; drug addicts; any guilt of grossly unprofessional or dishonorable conduct; any who have violated or attempted to violate the provisions of the Medical Practice Act; or of advertising of a character which may mislead; advertising professional superiority; purchase, sale or barter or use of any medical degree, license, certificate, diploma, etc., incident to an application to the State Board of Medical Examiners for license to practice medicine; altering, with fraudulent intent, any medical license, certificate or diploma; use of any such fraudulent credentials; the impersonation of another person in any examination required by the Medical Practice Act; the impersonation of a licensed practitioner, or employing directly, or indirectly, persons whose licenses to practice medicine have been suspended or who have been convicted of the unlawful practice of medicine in the State of Texas or elsewhere.

The same injunction feature carried by the Basic Science measure has been written into the Medical Practice Act measure. It is in line with the injunction features of the present Medical Practice Act.

The bill carrying revision of the Medical Practice Act will be printed in the style used in the Legislature, with numbered pages and numbered lines, and circulated as in the case of the Basic Science bill, already explained.

County Medical Society Adjudication Committees.—At a meeting of the Executive Council of the State Medical Association held September 29, in Fort Worth, referred to elsewhere in these colums, approval was voted by the Council of recommendations contained in a report from the Public Relations Committee, that county medical societies establish "adjudication" committees.

For the purpose of record and explanation, brief reference to the history or beginning of the idea that inaugurated this movement will be made. About six years ago, Harris County Medical Society decided to establish an adjudication committee, the functions of which would be to settle disagreements between members of that society and insurance carriers in industrial compensation cases. In order to give authority to the committee and its functions, the following amendment was incorporated in the by-laws of that society:

"An adjudication committee to supervise industrial compensation practice shall be elected at the annual business meeting. This committee shall consist of seven members, six to be elected and the seventh to be the president of the society ex-officio. Two members shall be elected each year. These terms shall be for three years. The duties of this committee shall be to adjudicate disputed bills between insurance companies and members to determine and to set fair fees for industrial practice in Harris County; to investigate industrial compensation contracts which are alleged to be unfair; to investigate and report to the board of censors allegations of solicitations of practice; to investigate medical testimony given in cases involving industrial injuries; and to establish such rules of conduct as the committee determines are necessary to carry on industrial compensation practice, according to the laws of the State of Texas and the principles and ethics of the American Medical Association."

During the first two years the Committee was kept busy settling disputes which came within the purview of its functions. In subsequent years, because of its excellent record of handling such cases, standards were determined and recognized, and there was little for the committee to do in connection with industrial compensation cases. Visualizing the potential value of such committee, its functions of late have been increased by that society so that it now serves a broader purpose as a public relations committee. Four additional members representing various medical specialties have been added to its personnel. The committee now serves as an arbiter in all cases in which complaints have been made by patients that they have been charged exorbitant fees for medical services or have been dealt with unfairly in any way by their physicians. The existence of the committee and its purposes have been widely publicized by the committee through the lay press of Harris County, which has been enthusiastic in its appreciation of this public service on the part of Harris County Medical Society. The good will engendered by such activity is readily apparent.

When this activity came to the attention of the Public Relations Committee of the State Medical Association, chairman Dr. Minter assigned to Dr. J. E. Hogan, member of the committee, a study of its provisions and experience. Following a report by Dr. Hogan, the Public Relations Committee recommended to the Executive Council that other county medical societies of the Association be urged to consider the advisability of establishing similar committees. The Executive Council warmly approved the suggestion.

For the smaller societies the existing Committee on Legislation and Public Relations required by the By-Laws of the State Medical Association, might well assume the functions outlined here for adjudication committees.

Whether or not county medical societies shall establish such committees will, according to the action so far taken, be purely a voluntary matter. The experience of the Harris County Medical Society indicates that such committees may serve a most useful purpose,

and the services rendered in the interest of the patient have been highly appreciated by the public.

The Public Relations Committee of the State Medical Association is to be commended for its excellent suggestion, and it is hoped that county medical societies will establish adjudication committees, as recommended.

County Medical Society Preceptorship Committees.—Reference has been made elsewhere in these columns to action taken by the Executive Council of the State Medical Association at a meeting September 29. The minutes of that meeting are published in this number of the JOURNAL (page 389) and should be read by every member of the Association.

One of the most unique proposals considered by the Executive Council was contained in a report prepared by and presented for the Public Relations Committee, by Dr. George Schenewerk, a member of the committee, in which it was recommended that county medical societies establish committees on preceptorship. Briefly stated, the functions of such committees would be to instruct applicants for membership regarding their responsibilities to the organization and the public before they are given the privileges of membership. It was proposed that such instruction be given in a series of six lectures, one each month, by members of the Society especially qualified. The broad subjects suggested for this series of lectures, with their subdivisions, were as follows:

1. History of Medicine and Medical Ethics
   - a. World
   - b. American
   - c. The American Medical Association
   - d. The State Medical Association
   - e. Component County Societies

II. Medical Education
   - a. Premedical
   - b. Medical
   - c. Hospital
   - d. Postgraduate
   - e. Periodicals and Medical Publications
   - f. Membership in Medical Organizations

III. Public Relations
   - a. Authority
   - b. Responsibility
   - c. Methods of Conduct
   - d. Probable contact groups

IV. Medical Economics
   - a. Location (urban - rural)
   - b. Type of building (office)
   - c. Rent or Purchase
   - d. Establishing an office
   - e. Individual or group practice
   - f. Bookkeeping and accounting
   - g. How to build a practice
   - h. National status in relation to other groups
   - i. The Armed Forces
   - j. The Veterans Administration

V. The Law
   - a. Malpractice
   - b. Status of the cults
   - c. Public Health Department
   - d. Police Department
   - e. Conduct in Court
   - f. Internal Revenue
   - g. Traffic Safety
   - h. Coroners Office

VI. Insurance and Banking
   - a. Social Security
   - b. Medical and Hospital Insurance
   - c. Workmen's Compensation
   - d. Types of contract and amount the individual physician should have
   - e. Investments for the physician

The intent of such instruction for candidates for membership in a county medical society is clear. A member well oriented in his responsibilities to the medical organization of which he is a part and in his responsibilities to the public as a physician will be a far more valuable member than one who is not. Certain fraternal organizations have long used such lectures for their candidates for membership. Certain churches require that their members receive instruction before they can be confirmed.

The debate by members of the Executive Council on the proposal of preceptorship committees for county medical societies brought out the point that any factors which might be interpreted as interfering with membership would violate the organic law of the State Medical Association and American Medical Association.

The Council voted 10 to 8 in approval of the establishment of county medical society preceptorship committees, provided their establishment is placed on a voluntary basis, and provided, further, that the lectures for prospective members also be voluntary rather than compulsory.

It is doubtful if much will be done about the matter under the decision of the Council. Two objections which might well be raised to the proposal is that the subjects to be covered are too extensive for the purpose desired, but the Committee in presenting the matter readily agreed that the subjects would, of course, be changed or adapted to the wishes of any county medical society. The second objection is that six months is a rather long waiting period, and the six lectures might easily be given in six weeks instead of six months. The shorter period of instruction, it is believed, would be much more readily accepted by those who would insist that the longer period of six months would tend to interfere with physicians applying for membership.

There is unquestioned merit in any procedure which will make better informed members of county medical societies, and it is believed that if a county medical society utilizes the proposal advanced here in a practical manner, new members will be highly appreciative of the instruction offered rather than

resentful. It is deserving of trial. It has been successfully used by the Los Angeles County Medical Society, California, over an extended period of time.

The Southern Medical Association will hold its fortieth annual meeting November 4-7, 1946, at Miami, Florida. General headquarters, including place of registration, information, motion pictures, scientific, hobby and technical exhibits, will be in the Municipal Auditorium in Bayfront Park on Biscayne Boulevard. Some of the scientific sessions will also be held in the Municipal Auditorium, and the remainder in bayfront hotels within five blocks. All of the sessions may be reached easily, walking from any hotels, including those downtown.

The afternoon of Monday, November 4, and morning of Tuesday, November 5, have been designated as "Miami Day," and a clinical program representing every specialty will be presented by the local profession. Beginning Tuesday afternoon, November 5, the twenty-one scientific sections of the Southern Medical Association, the Southern Branch of the American Public Health Association; Southern Chapter, American College of Chest Physicians; the American Society of Tropical Medicine and the National Malaria Committee, will each begin their several sessions concurrently, decision having been made by the Executive Committee to continue the war time streamlined type of program for one more year.

The scientific programs presented at meetings of the Southern Medical Association are of exceptionally high order, as is well known by all Texas physicians who have attended these meetings.

Miami is an interesting and delightful place to visit at any season of the year, but particularly during the month of November. Its recreational opportunities are too well known to be embellished here.

Any member in good standing in his State Medical Association is eligible to become a member of the Southern Medical Association and can accomplish such membership and register at this meeting by paying the annual dues of $4.00, provided he has his State Medical Association membership card with him. For this amount he will also receive the *Southern Medical Journal*, one of the best medical publications in this country. For those of our members who wish to combine a trip offering superb recreational opportunities, outstanding scientific pabulum, and fellowship of the highest order, the meeting of the Southern Medical Association at Miami is heartily recommended. Hotel reservations should be made and confirmed to the hotel of choice. If difficulty is experienced, the Hotels Committee of the Southern Medical Association in the Miami Chamber of Commerce, Shoreham Arcade, Miami, Florida, will gladly be of service.

The Oklahoma City Clinical Society announces its sixteenth annual fall clinical conference October 28-31, in Oklahoma City, with headquarters at the Oklahoma Biltmore Hotel. A distinguished group of guest speakers, headed by Dr. Harrison H. Shoulders, Nashville, Tennessee, President of the American Medical Association, has been secured for the occasion. This list with the positions of responsibility and preferment of each lecturer is published on advertising page 14 of this number of the JOURNAL, which should be referred to by any member of our Association contemplating attendance.

The Conference will be featured by general assemblies, postgraduate courses, roundtable luncheons and symposia, the scientific program utilizing to the greatest advantage the teaching abilities of the guest lecturers.

Social features and entertainment for the wives of visiting physicians are all that could be desired. For registrants at the Conference the clinic dinner and annual supper and smoker are events looked to with pleasure from year to year. For both registrants and visiting ladies the annual party given by the Oklahoma City Chamber of Commerce in the second evening is a particularly delightful occasion. In addition, a well rounded program of entertainment has been planned especially for the visiting ladies by the Women's Auxiliary of the Oklahoma County Medical Society.

There will be, also, the usual collection of informative technical exhibits which add much to any medical meeting.

A registration fee of $10.00 covers all features of the Conference. For those planning to attend, hotel reservations should be made promptly. If assistance is needed, the Executive Secretary of the Conference, 512 Medical Arts Building, Oklahoma City, will be glad to serve.

Texas physicians who have attended this conference are warm in their praise of its scope and conduct, and they are well versed in what a postgraduate clinical conference should be from experience in their own state. No physician will have cause to regret four days spent in the intensive postgraduate study offered under conditions that are attractive and inspiring.

Good Roads Constitutional Amendment.—A proposed amendment to the Texas Constitution which would prohibit the diversion

of gasoline tax funds to purposes other than good highways met the favor of the Legislative Committee of the State Medical Association of Texas when it was considered at a meeting of the Committee in Fort Worth on September 28. The amendment will be voted on in the November general election.

According to the amendment, which was adopted by the last Legislature, subject to ratification by Texas voters, the present allocation of funds from motor fuel taxes and motor vehicle registration fees would remain unchanged, with one-fourth of the net revenue from the fuel tax continuing to go into the free school fund, one-fourth to the county and road district highway fund to pay principal and interest on bonds issued years ago to finance the construction of state highways, one-half to the state highway fund, and all registration fees to the state highway fund and the road and bridge funds of the respective counties.

Advocates of the amendment point out that diversion of funds from taxes on road users has been gradually increasing for several years, reaching the sum of $200,000,000 throughout the United States in 1941, thereby seriously affecting the highway systems of the states in which such diversion occurred. The amendment would merely block similar diversion of funds in Texas in the future, thus continuing the fair practice of taxing those who use the roads to pay for their construction and maintenance. The importance to the economic welfare of developing an adequate system of primary highways with suitable routes through cities and necessary feeder roads—farm to market roads—is generally recognized. Cognizance of the value of such a highway system was taken by the Congress and the President in enacting a Federal Aid Highway Act in 1944, under the provisions of which during the first three years immediately following the official cessation of war, $500,000,000 of federal money will become available for highway construction in the various states, provided the states match the funds dollar for dollar. It is believed that such a project will provide economically worth-while work for thousands of returning war veterans. The proposed program in Texas for the three years will cost $172,593,600, of which half will be furnished by the federal government and half must be provided by the state. Under the program, 2 per cent of all rural dwellings will be brought within one mile of a paved road and 74 per cent within two miles. Paved roads will therefore be made available for most school buses, thus increasing the efficiency of consolidated rural educational systems. In order to participate in this program and to plan wisely for the future of Texas highways, a source of funds must be guaranteed. The proposed amendment to the Constitution would assure a supply of funds which would allow efficient long-time planning and financing.

The Legislative Committee of the State Medical Association recognizes the fact noted in the preceding paragraphs. Members of the Committee are also aware that good roads mean physicians can more readily reach patients in rural areas, and patients themselves can more easily seek proper medical attention and hospital care in urban centers, thus providing the background for better health among the residents of sparsely populated sections. The Committee therefore believes that members of the State Medical Association should support the good roads amendment and vote to ratify it when it is submitted to the electorate November 5.

Members of the State Medical Association are urged to coöperate with other farsighted groups throughout Texas which have already pledged themselves to support the good roads amendment. Passage of the amendment will be beneficial to a great many Texans, and will specifically serve the cause of better health.

CURRENT EDITORIAL COMMENT*

Penicillin by Prescription?—*The New England Journal of Medicine*[1] reports that the Department of Health of the City of New York has added to its Sanitary Code a section which ". . . restricts the sale of preparations containing penicillin or other antibiotic drugs to persons presenting a written prescription of a physician, dentist, podiatrist or veterinarian," except for such preparations which the department may specifically exempt. This is an action which deserves careful consideration by the health agencies of other communities, since the restriction is based upon sound and commendable principles.

Only infrequently is the use of penicillin followed by undesirable reactions, and certainly the incidence of such reactions alone would not justify restrictions upon its use. It is recognized, however, that inadequate dosage of the drug may readily lead to suppression of immediate symptoms without affecting a cure. This problem is of especial importance in cases of mixed infections. An additional problem is posed by the possibility

*This department of the JOURNAL presents editorial comments on current items pertaining to the science, art and practice of medicine, contributed by members of the State Medical Association and scientists closely associated with the medical profession of Texas. Invitation is hereby extended to any member of the State Medical Association of Texas to submit such discussions for this department. The discussions should not be more than 500 words in length.

of the development of penicillin-fast pathogens.

As long as the use of penicillin was restricted to parenteral modes of administration, the dangers inherent in its use were minimal, since competent medical supervision was almost automatically assured. With the appearance on the open market of tablets, troches, and ointments containing the antibiotic, the possibilties for inadequate self-treatment are tremendously enlarged, and the question of restricting its indiscriminate use becomes a vital one.

The public is sufficiently aware of the dangers of the unsupervised use of drugs which are potentially toxic. It may be a much more difficult task to convince people of the necessity for control of a drug which has been widely advertised as being almost ideal in its lack of toxicity. The major share of the educational burden must be assumed by groups and individuals associated with the medical profession.

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NEUROPSYCHIATRIC PROBLEMS OF RETURNING SERVICEMEN

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The neuropsychiatric problems of veterans constitute the major issue currently before the Department of Medicine and Surgery of the Veterans Administration. As of March 21, 1945,[2] the Veterans Administration had 101 hospitals containing 85,311 beds under its jurisdiction. Thirty-three, or approximately one-third of the hospitals, are straight neuropsychiatric hospitals and contain 50,551 beds. On the same date, 74,785 beneficiaries were receiving treatment in these hospitals of whom 44,400 were veterans with neuropsychiatric illnesses. Figures are not available for the number of veterans receiving outpatient care. However, roughly 60 per cent of the Veterans Administration present facilities and patients are neuropsychiatric in type. Actually twenty years had elapsed after World War I before the number of neuropsychiatric beneficiaries grew to exceed those of all other kinds. Some of these veterans add to the present patient load, but the fact that neuropsychiatric veterans did exceed all medical and surgical patients even as World War II ended does merit serious consideration.

The care of these patients thrust a tremendous burden upon an organization ill-prepared to meet it. It should be remembered that hospital care is but one of the functions of the Veterans Administration. Prior to the appointment of General Omar N. Bradley, in 1945, to the position of Administrator of Veterans Affairs, political machinations, administrative inefficiency, and inadequate appropriations created many deficiencies in the medical care provided for veterans. Serious shortages existed in beds, clinics, personnel, and planning—even plans delineating a treatment program were lacking.

The present administrator is trying to correct these inefficiencies, and now unlimited appropriations are available for expansion. Foremost, he should receive the support of everyone in his efforts to keep veterans' affairs out of politics. New hospitals and mental hygiene clinics are to be located near medical centers in order to secure the service of recognized specialists. Similarly a campaign is now under way to obtain a sufficient number of competent doctors and adjunct medical personnel to provide veterans with the best available medical attention. An influx of capable administrators whose energetic planning led to expanded facilities and acquisition of better personnel has enabled the Veterans Administration to promulgate specific methods by which all eligible veterans can receive treatment. This information is now available to the veterans, their families, and physicians. One of the purposes of this paper is to outline the various methods for neuropsychiatric treatment provided by the Veterans Administration since everyone seems confused about ways to secure the necessary treatment for veterans.

Before discussing these plans, it is of interest to know why the Veterans Administration anticipated 77,450 neuropsychiatric hospital patients by 1950. This will almost double the present number of neuropsychiatric beneficiaries in the next five years. From what large reservoir will these patients be drawn and what factors are responsible for the occurrence of such delayed, incapacitating illnesses? To begin with, the anticipated patients will be derived mainly from the following categories: first, those patients who were granted medical discharges from the Army because of neuropsychiatric disorders on a Certificate of Disability for Discharge; second, veterans who had psychiatric illnesses before or during their military service but did perform duty and were discharged through nonmedical channels (points, and so

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forth); third, those veterans with a negative history for a psychiatric illness, but who may be expected to develop disabling psychiatric conditions following discharge from the service. Of course, the whims of Congress are unpredictable, and new laws may provide unanticipated sources for more patients.

In regard to the first category, statistics recently released by the Surgeon General's Office, United States Army,[1] while incomplete, show that 320,000 veterans were given neuropsychiatric discharges in the period from January 1, 1942, through June 30, 1945. Obviously, the majority of these 320,000 veterans have been able to settle themselves in civilian life or else they are not recipients of care by the Veterans Administration. To a great extent this ability for readjustment will depend on the type of neuropsychiatric disorder for which the serviceman was given a discharge. The same statistics indicate that 70 per cent were discharged with the diagnosis of psychoneurosis, 15 per cent had psychoses, 11 per cent had neurological disorders or epilepsy, and the unclassified psychiatric conditions made up the remaining 4 per cent. In one follow-up series of men discharged from the Army for psychoneurosis, 86 per cent were gainfully employed, and this is to be expected as psychoneurosis is a recoverable disorder. In another study of veterans discharged with a diagnosis of psychosis, 60 per cent had readjusted in civilian life and were reemployed.

An unknown number of veterans either had psychiatric illnesses prior to military service or else developed an illness in the service, but many were able to adjust to the Army and were eventually discharged through the point system. For example, in addition to the previously mentioned 320,000 servicemen who were given medical discharges, approximately 700,000 more servicemen were admitted to Army hospitals with neuropsychiatric conditions, but later were returned to a duty status. Likewise, all large training centers had mental hygiene clinics where unnumbered thousands of servicemen received psychiatric treatment and were able to continue effectively in the service. Statistics are not available from the other military services, but unofficial figures are reported as comparable in proportion to the numbers involved. Roughly 10,000,000 servicemen have now been discharged by the point system after performing satisfactory military service. The vast majority of these veterans had stable, well-adjusted personalities prior to military service, and experienced little or no emotional disturbances while in uniform. However, many servicemen who received nonmedical discharges are now consulting physicians because of neuropsychiatric complaints.

Next, let us consider the factors which might keep veterans in each of these categories from readjusting to civilian life or else could cause them to develop personality difficulties after a period of apparent adjustment. It must be assumed that the exigencies of military life exerted a profound and perhaps detrimental influence on the personality make-up of many servicemen. None the less, the ability to readjust to civilian life and maintain good mental health is dependent upon two other significant factors. The most important quality is the degree of personality integration and the basic emotional stability existent in the veteran's make-up, while the economic, social, and interpersonal relationships within the veteran's environment constitute a second factor which can be both controlled and modified.

The stable, well-adjusted veteran with a minimum of basic anxiety can make the transition from civilian to soldier and back to civilian status again without much emotional upheaval. The less stable personality and the chronically maladjusted person may develop an incapacitating psychiatric illness unless a fairly ideal environment is created for him. Medical authorities realized that it was impossible to give individual counseling or psychiatric guidance to all returning veterans. Consequently, efforts were made to improve the veteran's environment through an educational campaign designed to reach the veteran's family, his friends, his employer, and other persons who could facilitate resettlement in civilian life. The National Committee for Mental Hygiene and similar organizations did an excellent job of propagandizing the public on this matter. Rennie and Woodward's[4] expressions summarized the consensus of authoritative opinion on readjustment advice: "Friends and relatives are advised to listen well when he wants to talk, but not to pry; to face the reality of his disability without ignoring or magnifying it; to treat him as an essentially normal, competent person, not as an invalid; to allow him time and freedom in becoming acquainted with the old environment and in reestablishing old contacts; to render assistance in returning to work." These authors stressed the importance of securing professional help where it is needed.

These efforts are to be commended. From a practical standpoint, the average veteran can work out his own problems if given freedom of action and the opportunity to create an environment similar to the one he had been fighting to preserve. Unfortunately, instead of peace and security, world conditions

are now more chaotic than ever. The renewed threat of war, mounting unemployment, delayed production through continued strikes by already unpopular labor unions, the inability to find a house in which to live or a suit to wear, or the apparently selfish motives of some persons who profited by remaining at home are some of the circumstances which tend to make the veteran feel that his military service was unappreciated and that he had been "played for a sucker." Where such beliefs do exist, it may aggravate the pent-up hostility and resentment which many veterans already hold toward the military service. These further frustrations are sufficient to mobilize more anxiety and create greater tension either to reactivate a previous illness or else produce a new one.

VETERANS ADMINISTRATION PROGRAM FOR NEUROPSYCHIATRIC CARE

The following procedures on neuropsychiatric care for veterans in Texas were submitted by the Manager, Veterans Administration, Waco,[3] and are presented in outline form:

A. Methods of admission to hospitals.
   I. Emergency admission of patients to Veterans Administration hospitals.
      a. Any eligible veteran who presents a medical emergency, needing immediate hospitalization, is given preference for admission.
         1. Eligibility—any wartime veteran honorably discharged irregardless of service connection. Veterans of peacetime service are eligible only for service-connected disability. Even veterans discharged "without honor" are entitled to emergency treatment while eligibility is being reviewed. Dishonorably discharged veterans are never entitled to treatment.
      b. Methods of emergency admission.
         1. Call the Admitting Officer, Veterans Administration, Waco, either day or night. Request for admission may be made by the veteran, a member of the family, the physician, the local Contact Officer of the Veterans Administration, the American Red Cross, or an ex-service organization.
         2. Permission for emergency admission can be granted by the responsible officer on duty.
         3. Where transportation reimbursement is desired, it can be granted at the time of the telephone conversation.
         4. A court order for confinement is not required for admission.
   II. Emergency admission of patients to contract hospitals.
      a. Any veteran of war or peace who constitutes an emergency where the disability requiring hospitalization is service-connected; or any woman veteran whether or not the disability is service-connected who constitutes an emergency, may be hospitalized in a private hospital if the veteran cannot be safely moved or if a Veterans Administration hospital is not readily available. Immediately contact either the nearest Regional Office or Manager, Veterans Administration, Waco.
   III. Acutely ill veterans who present themselves at Army or Navy specialized psychiatric hospitals are accepted as emergency admissions for later transfer to the Veterans Administration.
   IV. Routine methods for hospitalization of all neuropsychiatric patients.
      a. Eligibility for admission is as defined above.
         1. Emergency conditions receive first consideration.
         2. Veterans with service-connected disabilities receive second consideration.
         3. Next come nonservice-connected disabilities for which bed space is very inadequate at this time. Veterans must make a sworn statement that they are unable to defray expenses of private medical treatment.
      b. Method for routine admission.
         1. Secure Veterans Administration Form P-10 from local Contact Officer, who will assist the veteran in filling out page 1.
         2. Physician should state clearly and specifically the positive findings on the Doctor's Certificate to facilitate admission.
         3. Request for transportation should be included where desired.

B. Existing outpatient service for veterans.
   I. Outpatient treatment is provided for any disease or injury that is service-connected and causes discharge from service or for any condition becoming worse after discharge if adjudicated as aggravated by service.
   II. Examinations are conducted for veterans filing claim for pensions.
   III. "Point discharges" are entitled to outpatient treatment if the Chief Medical Officer believes there was a reasonable probability that the veteran's disability was incurred in or aggravated by service.
   IV. The Chief of Outpatient Service, Veterans Administration, Waco, or the appropriate Regional Office can designate a private physician to treat a veteran for a specified number of times at a specified fee. Similar arrangements can be made to conduct neuropsychiatric examinations for a fee of $7.50 each.

C. Mental Hygiene Clinics (to be established in Texas).
   I. Clinics at Regional Offices for active therapy (pending).
   II. Contract Civilian Clinics—none presently operating in Texas.

D. "Family Care" Plan.
   I. Veterans are placed in selected homes by Manager, Veterans Hospital, Waco, or Regional Office. A sum of $10 per week is paid for lodging of veteran.

E. Proposed Plan for Care by Private Physicians and in Private Hospitals.
   I. The Veterans Administration has a method of providing treatment by private physicians and in private hospitals to veterans with service-connected disabilities. To do this, arrangements must be made by state medical societies with the Veterans Administration. Seven states now have contracts with the Veterans Administration. Texas is not one of them and to date a plan of medical care for veterans has not been submitted by the State Medical Association of Texas to the Veterans Administration.

CONCLUSIONS

The Veterans Administration program for medical care of eligible veterans is still expanding and the foregoing procedures may soon be altered. It would seem advantageous for the State Medical Association of Texas to participate in the program for private treatment of veterans with service-connected disabilities. The Veterans Administration is to be commended for the revolutionary stand which permits veterans to choose their own private physician and, if necessary, to enter a civilian hospital. With the shortage of physicians in the Veterans Administration, it is hoped that the free choice of a doctor will be extended to all honorably discharged servicemen, because many veterans with service-connected disabilities refuse to accept treatment in a government hospital. It is a regrettable, but not illogical attitude, since the vital physician-patient relationship that is so essential to successful treatment has not existed in state-supported medicine. The entire neuropsychiatric training program of the Veterans Administration is designed to train young physicians to understand a patient's needs and it should soon eliminate this particular complaint.

In addition to provisions for medical care of returning servicemen, something must be done to preserve the health of veterans and to promote recovery in those who have recoverable illnesses. It will be recalled that the psychoneurosis is a recoverable illness and with proper management, this large group of veterans can be restored to health. This would lighten the future load considerably. The number of veterans with service-connected psychoneurosis who are entitled to a pension is unknown. Persons with a psychoneurotic illness seldom recover while drawing a monetary reward, even though the compensation represents but a small fraction of their former earnings. Congress should be encouraged to enact new laws providing for some type of final monetary settlement in the case of veterans who have a psychoneurosis. The furor in service organization circles would be great, but the public can be educated to understand that this is both a practicable and desirable idea. Once a final settlement has been made, recovery with treatment is possible, as it removes a stimulus for the person to remain ill.

Until late in the war, thousands of maladjusted personalities who developed situational anxiety in response to unpleasant military assignments were given a medical discharge with a diagnosis of psychoneurosis. These men simply were ineffectuals in the military service, for they had previously adjusted to civilian life and can again adapt themselves if the incentive to do so is produced. Many of them experience feelings of guilt about receiving a medical discharge and this is abetted by a sense of failure in military life. Both conscious and unconscious motives operate to continue the illness in order to protect their self esteem. A careful review of their medical records by a competent medical board having the authority to remove unwarranted diagnoses and grant a nonmedical form of discharge would help to remove the need to continue the illness. The accomplishment of such proposals can attain fulfillment when supported by the medical profession.

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ABSTRACT OF DISCUSSION

Dr. A. Hauser, Houston, one of the most progressive steps that the medical department of the Veterans Administration has made was the decision to locate hospitals near medical centers and medical schools. Now, as Dr. Ford has outlined in his paper, the Veterans Administration has blueprinted an excellent plan for the treatment of veterans during the next twenty years and for training the physicians who will administer the treatment. At present, the acutely ill veteran, including the psychiatric patient, can obtain admission into a Veterans hospital quickly—but it is a different story for the veteran who does not desire to go to the Veterans Administration hospital, and whose illness might not have been proven to be service-connected.

An elderly patient with a severe agitated depression and suicidal trends recently came under my care. He was a veteran of the Spanish American War, and his family desired his admission to the Veterans hospital at Waco. After application, he was admitted to the hospital within forty-eight hours.

Another patient, a young male veteran of World War II, who had served with the Marine Corp in Japan, had been discharged with a beginning depression. When the patient came to my office, he had developed a full blown psychosis and needed immediate treatment. Neither the patient nor his brother wished care in a Veterans Administration hospital. He was given ambulatory shock treatment with excellent results and was saved from self destruction. When he applied to the Veterans Administration for reimbursement of medical expenses incurred, he was informed that because his condition was considered nonservice-connected, nothing could be done. This action was an obvious injustice and an extremely inefficient method of handling such a case. This veteran will probably have to traverse a rocky path of red tape before his case is properly adjudicated.

Dr. Ford's suggestion of lump sum liquidation for chronic psychoneurotic cases deserves careful consideration. Will such a method boomerang back in an unfavorable direction?

In closing my discussion, I wish to express my appreciation to Dr. Ford for bringing this very timely discussion before us. His paper has been thought provoking and stimulating. We shall need more education on these matters for many years to come.

PRIMARY ATYPICAL PNEUMONIA WITH A REPORT OF SIXTY CASES

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Primary atypical pneumonia has increased in prevalence during the past decade. It probably extended as far back as 1872,[2] however, when a similar clinical syndrome was described; the apparent current increase is primarily the result of the widespread use of roentgen examination of the lungs. In the United States Army[15] primary atypical pneumonia has constituted 20 to 25 per cent of all respiratory infections and 75 to 80 per cent of all pulmonary lesions. The purpose of this paper is to present a statistical study on 60 cases seen in civilian practice, showing its high incidence in the civilian population, with a brief review of the pertinent literature.

Etiology.—The etiology of primary atypical pneumonia has not been definitely established but great progress has occurred in the past few years. Many authors think it is an old disease assuming epidemic character because of either a change in the virulence of the causative agent or an increase in individual susceptibility. Many investigators[4,19] have isolated viruses which closely resemble the so-called primary atypical pneumonia virus. Comparable viruses are known to be the causative factors of lymphogranuloma venereum, psittacosis, lymphocytic choriomeningitis, and influenza A and B.[11] A nonhemolytic streptococcus has been isolated by Thomas and others[16] from the lungs and sputa of patients with primary atypical pneumonia. Specific antibodies directed against this species of streptococcus have been demonstrated in the convalescent serum of patients with the disease.

More recently the Commission on Acute Respiratory Diseases of the United States Army has been able to transmit the disease to volunteers from the throat washings and sputum of patients. Since untreated and filtered materials were equally successful in the production of the disease, a filtrable agent would appear to be responsible. The Commission thinks the pneumonia is transmitted by contact or droplets. Other infections, characterized by atypical pneumonia, which clinically closely resemble virus pneumonia are American Q fever, coccidiosis, ornithosis, toxoplasmosis, and certain rickettsial diseases with pneumonic manifestations.

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Pathology.—The most extensive pathologic studies to date are those reported by Golden[6] on a series of 90 autopsied cases in the United States Army. The basic pulmonic lesion is an acute interstitial pneumonitis, which in cases uncomplicated by secondary bacterial invaders showed involvement of variable numbers of bronchioles. The bronchiolar walls are heavily infiltrated with round cells and lymphocytes, and they are markedly edematous. Lymphocytic and mononuclear cellular infiltration of the alveolar walls are observed in contrast to the changes seen in bacterial pneumonia. There is a great tendency for secondary bacterial infection as in other virus pneumonias.

Symptoms.—Clinically, primary atypical pneumonia appears in two forms. It may occur concomitantly in epidemics of a mild or moderately severe disease of the upper respiratory tract, which tend to occur in Army camps, hospitals, and institutions especially in the young adult age group (table 1). However, some cases are isolated, sporadic, disseminated, and nonseasonal, of mild to severe degree, and may occur in any age group. The clinical course consists of an insidious febrile onset, with a progressively regular rise and fall of temperature, without diurnal regularity, reaching at times 103 to 105 F. after the first day or two (table 2). The fever is accompanied by progressive malaise, weakness, generalized aches, profuse diaphoresis, and often severe headache (table 3). The headaches are frequently frontal in location,[7] boring in nature, and of a marked severity. Some degree of chest pain is present in about one-third of the cases, but it is not as common as in lobar pneumonia because the disease tends to limit

TABLE 1.—*Age and Sex Distribution, Primary Atypical Pneumonia.*

Age: Range was from 15 to 65 years.		
Years	No. Cases	%
15-20	12	20
21-30	36	60
31-40	8	13.3
41-50	1	1.7
51-60	2	3.4
61-70	1	1.7
Sex: 34 of the 60 were males = 56%.		

TABLE 2.—*Temperature, Primary Atypical Pneumonia.*

Admission Temperature: Range, 98.6 F. to 105.2 F.; Average, 102.2 F.		
Highest Temperature Reading at Any Time:		
	No. Cases	%
Less than 101 F.	17	28.3
101-103 F.	21	35.0
101-105.2 F.	22	36.7

Types of Fever:	No. Cases	%
Continuous (oscillations less than 2 degrees F.)	11	18.0
Remittent (oscillations greater than 2 degrees F.)	47	78.3
Transient secondary rise	8	13.3

itself more to the hilar region of the lung. Shaking chills are rare, but a chilly sensation is common and may be associated with diaphoresis. On the third and fourth days, a nonproductive cough develops. Later the patient may raise whitish phlegm, and in a small per cent it may be blood tinged. Occasionally the disease is accompanied by meningeal symptoms, constipation, abdominal pain, or abdominal distention. The slowly developing crescendo type course lasts ten to twelve days (table 4). Decrudescence by lysis usually occurs, but in a few cases there is a migration of signs and recrudescence of severity.

TABLE 3.—*Symptoms, Primary Atypical Pneumonia.*

Symptoms		No. Cases	Frequency
Headache	Frontal	33	55.0
	Generalized	9	15.0
	Occipital	4	6.6
	None	14	23.4
Diaphoresis		37	61.0
Vomiting		9	15.0
Constipation		12	20.0
Cough		60	100.0
Chest Pain		22	36.0
Backache		15	25
Malaise		50	83.3
Restlessness		15	25
Stiff Neck		10	16.6

TABLE 4.—*Course, Primary Atypical Pneumonia.*

Duration of fever while in the hospital:	
Range, 0-16 days.	
Average duration, 5.5 days.	
More than 10 days, 10 cases, 16.6%.	
Defervescence by lysis, 49 cases, 81.6%	
Length of Hospitalization:	
Range, 2-36 days.	
Average duration, 15 days.	
More than 15 days, 22 cases, 35%.	

Physical Signs.—The objective manifestations are conspicuous by their absence (table 5). In many cases for the first four or five days no chest abnormalities whatsoever are present. In about 60 per cent of the cases, after the first three days of the disease, fine or medium moist rales make their appearance in the involved areas. It has been my experience that these rales often shift from one location to another in one lung, and also to the opposite side, without any definite roentgenologic evidence of new involvement. Occasionally sibilant or sonorous rales may be heard. The respiratory rate usually runs between 20 and 30 per minute. In only 10 per cent of the cases is impaired resonance found, and in a similar number bronchovesicular breath sounds are heard. A few investigators[7] report splenomegaly in some cases, and a relative bradycardia is present. An injected pharynx is found in about one-fourth of the cases.

TABLE 5.—*Physical Observations, Primary Atypical Pneumonia.*

Crepitant Rales:	36 of 60 cases on admission	= 60%
	57 of 60 cases developed rales	= 95%
Respiratory Rate:	Range, 18-34 respirations/minute.	
	50 had rate less than 25/minute	= 83.4%
	10 had rate more than 25/minute	= 16.6%
Suppressed Breath Sounds:	9 of 60 cases	= 15 %
Impaired Percussion Note:	7 of 60 cases	= 11.6%
Palpable Spleen:	6 of 60 cases	= 10.0%
Injected Pharynx:	15 of 60 cases	= 25 %
Heart Rate:	23 did not exceed 90/minute	= 38.3%
	29 ranged 90 - 110/minute	= 48.0%
	6 ranged 110 - 130/minute	= 10.0%
	1 was above 130/minute	= 1.6%

Roentgen Evidence.—Radiographic proof (table 6) of the pulmonic lesion is the one objective criterion required by most authorities to establish the diagnosis of primary atypical pneumonia. Fredd[5] found that it occurred in 0.27 per cent of 23,465 clinically well persons. It usually appears after the first two to three days of illness. Only 32 per cent of cases are diagnosed from history and physical examination.[17] Scadding[14] divided the cases on the basis of roentgenographic evidence into two main groups: The first group, which constitutes the majority, consists of a benign circumscribed pneumonia, which is fairly well localized but not sharply defined, of uniform density, and located usually in the lower lobes. The second group, which constitutes less than 10 per cent of any reported series, consists of the disseminated focal pneumonia which produces a picture of diffuse, rather coarse mottlings with foci varying from 2 to 5 mm. in diameter. It is usually in a segmented lobular distribution rather than lobar.

TABLE 6.—*Roentgen Manifestations, Primary Atypical Pneumonia.*

Location	No. Cases	%
Left Base	21	35
Right Base	15	25
Both Bases	2	3.3
Right Cardiophrenic Region	2	3.3
Right Upper Lobe	12	20
Left Upper Lobe	3	5
Right Upper and Right Middle Lobes	1	1.6

The first roentgenologic evidence is an increase in bronchial markings, most pronounced at the hilar areas, followed shortly by irregular patches of increased density further peripherally. The density is not as pronounced as that of lobar pneumonia,[7] but a soft mottled, hazy, or glazed appearance is noted. In addition resolution is frequently prolonged, and increased bronchial markings and some parenchymal mottling may remain long after the patient is clinically well. The resolution starts first at the periphery and progresses toward the hilum. Recently Adams and others[1] emphasized the importance of lateral chest films for accurate localization of the lesions.

Laboratory Observations.—Cold hemagglutinins (table 7) may be absent but when present they usually begin to rise in titer from the sixth to the tenth day[7] and reach

their peak by the tenth to the fourteenth day. The height[15] of the cold agglutinin's titer bears no definite relationship to the severity of the disease. A few investigators[17] have found agglutinins for an indefinite streptococcus.

Sedimentation rates give a notably poor correlation with the roentgen findings. Early in the course of the disease, the leukocyte count is relatively low, that is 10,000 or less in about 84 per cent of the cases, but in the later stages a mild leukocytosis, with a count of up to 12,000 to 14,000, may develop. A transient albuminuria may occur if

TABLE 7.—*Laboratory Findings, Primary Atypical Pneumonia.*

Leukocyte Count:	Range, 3,200 to 16,500; average, 7,800. Less than 10,000, 84%.	
Cold Hemagglutinins:	6 tested—4 positive between eighth and fourteenth days; 2 negative.	
Sputum:	40 cases had sputum examination for organisms.	
	Tubercle bacillus — all negative.	
	Beta-hemolytic streptococci — 9 positive,	22.5%
	Higher types of pneumococci — 3 positive,	7.5%
	Blood tinged — 5,	8.3%

sufficient hyperpyrexia is present. A heterophil antibody reaction using horse cells has recently been reported by Adams and others.[1] A titer of 1:448 (horse cells) was considered to be a significant positive. Thirty-six per cent of their cases gave titer of this degree at some stage of the disease.

Complications.—The complications of the disease (table 8) are relatively few in most series; however, in a report by Higley and others,[8] 42 per cent of 202 cases had some type of complication. Pleurisy occurred in 19 per cent, pleural effusion in 2 per cent, and empyema, atelectasis, lung abscess, nonpurulent arthritis and pericarditis each occurred in less than 1 per cent. Van Ravens-

TABLE 8.—*Complications, Primary Atypical Pneumonia.*

	No. Cases	%
Pleural Effusion	2	3.3
Interlobar Effusion	1	1.6
Thickened Pleura	1	1.6
Urticaria	1	1.6
Otitis Media	2	3.3
Maxillary Sinusitis	1	1.6
Total	8	13.2

waay and others[18] thought that complications were most likely to occur in those patients allowed to be ambulatory too soon. In 500 cases reported by Karpel and others less than 3 per cent had complications. Bronchiectasis[9] is most likely to occur when the atypical pneumonia has a protracted course and particularly when it is associated with roentgenologic evidence of unrelieved atelectasis. Two cases of meningomyelitis have been reported,[13] and fibrinous pericarditis, migrating periarthritis (jaundice, and erythematous skin eruptions were observed by Kneeland and Smetana.[10] The average hospital stay in many cases was prolonged by weakness, a persistent cough, rales, and relatively slow resolution of the pneumonic process. In a few cases maxillary sinusitis, otitis media, and peritonsillar abscesses occurred, but these were thought to be secondary to the upper respiratory tract infection.

Treatment.—As in many diseases, rest in bed appears to be the best treatment. Though prevailing opinion considers the sulfonamides of no value, there are some who urge their use to forestall secondary bacterial invasion, and in any event there is no contraindication to chemotherapy. If no response is obtained after two to three days of full doses and at adequate blood levels, the drug may be discontinued.

If the pleural pain is severe, procaine hydrochloride injections[7] of the intercostal nerves at the proper levels may be beneficial. Scultetus binders,[3] hot water bottles, or an electric pad may give relief from the pain.

The use of oxygen is indicated if either cyanosis or dyspnea is present. Steam inhalation, throat irrigations, and expectorants may be beneficial. As in other upper respiratory tract infections, fluids should be forced. Lumbar punctures may be tried in an attempt to relieve the more severe headaches and have been found by some investigators,[3] including myself, to be quite helpful. Codeine continues to be the best medication to suppress the cough.

Convalescent serum[19] given in small repeated doses has been of some value in a few reported cases. Salicylates[3] probably should be avoided unless the patient is suffering from a high fever and is not sweating. Thiamine hydrochloride and nicotinic acid[3] have been used to prevent delirium.

Roentgen therapy has had a limited trial in the treatment of primary atypical pneumonia. Oppenheimer[12] first introduced roentgen therapy with good results to control the cough in the late stages of the disease in those patients who developed a refractive cough. Later he obtained the best results when roentgen therapy was employed in the early stages. Other investigators have used slightly larger doses of roentgen therapy and repeated it in twenty-four hours if the clinical response was unsatisfactory. In 23 of their treated cases, 22 responded. The number of sick days and the hospital stay were reduced to half. Nine patients with unresolved pneumonia after thirty days were given roentgen therapy, and their lungs all cleared in four days or less.

Differential Diagnosis.—Numerous diseases enter into the differential diagnosis of primary atypical pneumonia, but primarily those of an acute nature which involve the respiratory system need be differentiated. Lobar pneumonia is characterized by an abrupt onset, a continuous fever, marked leukocytosis, and extensive pulmonary manifestations in contrast to primary atypical pneumonia with its slow onset, remittent type of fever, normal leukocyte count, and comparatively few lung manifestations. Finally the typical roentgenologic appearance of the two diseases completes the differential picture.

Influenza may also be confused with atypical pneumonia. With influenza there is usually an abrupt onset, prostration, repeated chills, a loose cough, often bloody sputum, a remittent type of fever, and frequently more severe dyspnea and cyanosis. Influenza virus when introduced into ferrets causes specific antibody reaction and therapy allows accurate diagnosis.

In differential diagnosis must also be included bronchopneumonia, which most characteristically occurs in very young and elderly persons, in contrast to the adolescents and young adults who commonly develop atypical pneumonia. Bronchopneumonia more often follows other diseases such as diphtheria, measles, and whooping cough, or appears in the terminal stage of many severe infections. Finally the appearance of the roentgenogram is very different in the two conditions.

Tuberculosis, especially of the acute exudative variety frequently has to be considered when the apices are involved with atypical pneumonia. The negativity of the sputum and the rapidity of resolution of the lesion belies the seriousness of the first impression.[20] Serial roentgenograms of the chest, at short intervals, are the best guide to the relative benignancy of the condition.

Pulmonary infarction may be differentiated from atypical pneumonia by the sudden severe chest pain, abrupt rise in temperature, grossly bloody sputum, and the presence of a contributing etiologic factor, such as heart disease or pelvic thrombophlebitis. Again the roentgenogram is helpful in differentiating the two diseases.

A severe common cold at times very closely resembles primary atypical pneumonia, and a negative chest roentgenogram may be the only method of ruling out a pneumonitis.

In the period before development of characteristic pulmonary signs,[1] especially in Army life, the diagnosis was often in doubt between malaria, infectious mononucleosis, fevers of the enteric group, meningoencephalitis, and infective hepatitis.

In most reported series there have been no deaths from the disease. Karpel and others have found a mortality of 0.2 per cent in their series of 500 cases.

DISCUSSION

The increased use of the roentgenogram has demonstrated a picture that is characteristic and differing in its development, course, and resolution from that of bacterial pneumonia and in some cases it has revealed the presence of the disease in the absence of other evidence. The absence of dyspnea, tachycardia, cyanosis, and minimal physical signs are probably caused by the interstitial character of the disease. Proper treatment depends on recognition of its high incidence and also the pathologic symptoms and lack of correlation between the physical and roentgen signs.

Convalescence ordinarly is prolonged but uneventful and recovery the rule. In Army practice[18] the patient was kept in the hospital until the temperature had been normal for two weeks, a consistently low sedimentation rate was obtained, and he could tolerate exercise without reactivation or impaired clearing of the roentgenogram. In civilian practice convalescent periods have been shortened because of different existing circumstances.

SUMMARY

A statistical study of 60 cases is reported with factors relative to signs, symptoms, course, and complications. A brief review of the pertinent literature is also presented.

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ABSTRACT OF DISCUSSION

Dr. Carl F. Shaffer, Houston: Dr. Chapman has been able to condense to a short period of time an extensive subject. There is no other pulmonary disease that has received more notice in the literature in the past five years than primary atypical pneumonia. This may eventually become the "typical" pneumonia, and the bacterial types, because of their control by chemotherapy and antibiotic therapy, become less common.

The etiology of this disease has been fairly definitely established. The importance of the differential diagnosis from the influenzal type of respiratory infection is a point that I want to mention. This may be of value in regard to treatment of the acute phase of these illnesses. The serious consequences of influenza, especially in the epidemic form, are the development of secondary bacterial infections. In this respect, the use of penicillin may be important for the reduction of mortality in epidemic influenza. A typical pneumonia does not have as comparatively frequently, the secondary bacterial infection that may result in immediate mortality. But, since it is possible that atypical pneumonia may be pathogenic for certain chronic pulmonary diseases, especially bronchiectasis, and because penicillin is innocuous, aside from hypersensitivity reactions that occur in a small number of persons, it may be advisable to give this antibiotic to reduce the frequency of chronic pulmonary complications. Penicillin aerolization has been reported to be therapeutically effective in established cases of bronchiectasis. The routine use of this particular method may be an effective means of preventing this and similar chronic pulmonary complications.

SOCIAL FACTORS IN TUBERCULOSIS

When the wage earner is stricken with tuberculosis, a tremendous adjustment is required in the living habits of the other members of the family. The steady income usually ceases abruptly, and the family provider is reluctant to enter a sanatorium, leaving his family unprovided for. A mother contracting tuberculosis is also loath to enter a sanatorium until reasonable provision has been made for the care of her children.

Many of these social and economic factors, which inhibit the control of tuberculosis, may be overcome if the welfare agency, in coöperation with the health authorities, takes a liberal and generous attitude toward the other members of the family who are potential cases of tuberculosis. Money spent in this manner should not be looked upon as charity, but as an investment or insurance by the state or municipality against future and large expenditures, which will undoubtedly follow if a niggardly policy is followed. Penny-wise policies will only add to the burden of the future taxpayer. It must never be overlooked that every case of tuberculosis prevented is not only money saved to the treasury but a life to the nation.—Canad. Pub. Health J., Jan., 1946.

JAUNDICE IN THE NEWBORN INFANT

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There has been so much written in recent medical literature about erythroblastosis fetalis that I think it may be well to review some of our experiences with jaundice in newborn infants, particularly with varieties due to causes other than erythroblastosis. There is ample evidence that there is little excretion of bile prior to birth so that the problem is complicated by occurring at a time when this function of the liver is being established. There are more changes in body physiology in this period of life than at any other time from conception to senility.

PHYSIOLOGIC JAUNDICE

Although only about one-half of newborn infants become detectably jaundiced, the serum will with rare exceptions show some elevation of the icterus index, even in the cord blood. The most apparent explanation of this jaundice is that it is a hemolytic type—a result of the reduction of the polycythemia of the fetus with the production of bilirubin more rapidly than the liver is able to excrete it. If this is the only factor, there should be some demonstrable relation between the degree of blood destruction and the degree of elevation of the icterus index. That this is not true has been previously shown (fig. 1).

Ross and associates[9] found the average total excretion of bilirubin and urobilin in the stools during the neonatal period to be lower in infants visibly jaundiced than in those not visibly so. Moreover, the total excretion of urobilin in the urine was lower in infants visibly jaundiced. Neither of these findings is in keeping with a purely hemolytic jaundice. The obvious assumption is that there must also be some impairment of hepatic function present during this period of life. However, various liver function tests have not shown variations of results in newborn infants which can be correlated with variations of the icterus index.[10]

Although it is a time-honored custom to attribute many symptoms in newborn infants to physiologic jaundice, it is becoming more and more apparent that this is a normal process and without symptoms other than icterus. Almost never present at birth, the jaundice makes its appearance in the first few days of life and rarely lasts longer than twelve or fourteen days. Although it is

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usually slight in degree, I have observed infants whose icterus index reached 75 to 100.

CONGENITAL ATRESIA OF THE BILE DUCTS

The cause of congenital atresia of the extrahepatic tracts is obscure, as is the cause of most congenital anomalies. The atresia may involve only portions of the extrahepatic ducts or their entire course. Apparently in some cases the extrahepatic ducts are congenitally absent.

The most outstanding symptom is jaundice. It is absent at birth and its early course is similar to that of physiologic icterus except that it persists and steadily increases to a marked greenish bronze.

The surprising thing about the jaundice, in these cases is that it is always much more marked than either the quantitative Van den Bergh test or the icterus index indicate. This is probably because much of the color is due to green biliverdin, an oxidation product of bilirubin, which does not react with the diazo reagent used in the quantitative determination. Not only is the jaundice more severe than the icterus index indicates, but the icterus index frequently shows surprising daily fluctuations. This is because the color of the serum is actually not even the same color as the dichromate standard. The standard is yellow; the unknown serum is a greenish yellow. Since an accurate comparison is impossible, an estimate is usually made, and this estimate may vary from day to day. Moreover, since the quantitative Van den Bergh test and icterus index actually measure two different properties of the serum, results obtained with the two tests show no constant relation to each other.

The facts are very well illustrated in the 2 cases of congenital obstructive jaundice of figures 2 and 3. In neither case did the icterus index exceed 200, yet from the intensity of the jaundice one would have expected it to have been much higher. The results of the quantitative Van den Bergh tests are not tabulated but they varied between 12 and 18 mg. per 100 cc. of serum, surprisingly low figures for the intensity of the jaundice.

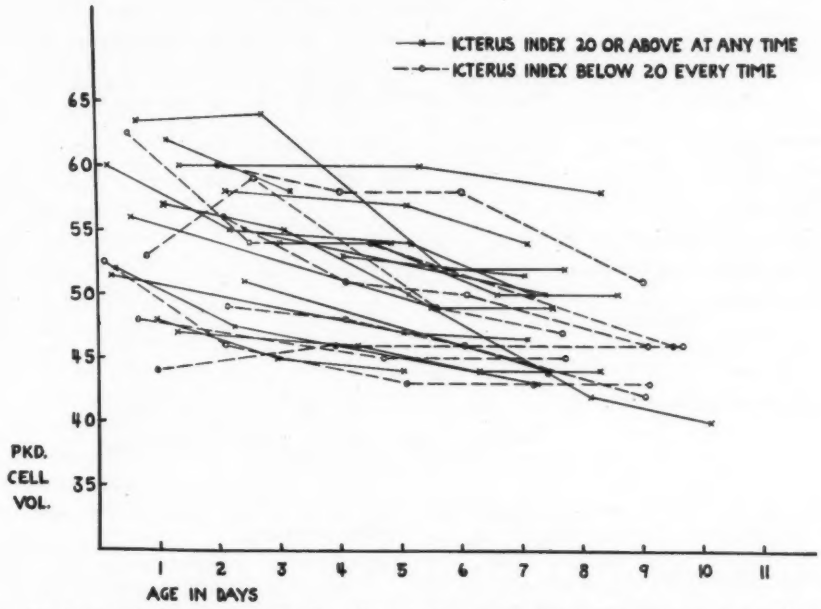

FIG. 1. Seventy-nine packed cell volume determinations on 24 newborn infants from 2 to 243 hours of age. Reproduced from Salmon and Richman[10] with permission of the editors of the *Journal of Pediatrics*. There is no correlation between the degree of blood destruction and the icterus index.

The stools of the first few days of life resemble normal meconium. After this time the stools are classically characteristic of those seen in complete obstruction—pale gray or white in color and putty-like in consistency.

The nutritional status is usually poor but it is always surprisingly good when consideration is given to the fact that there has never been bile in the intestinal tract. As the weeks and months go by it becomes apparent that development is delayed.

The liver is very firm, smooth, and en-

larged, frequently reaching the level of the umbilicus. Probably because of the marked biliary cirrhosis which develops and the ensuing portal hypertension, the spleen enlarges and after several months ascites may appear.

Some of the constitutional sequelae of the digestive defect may not appear for months and even then may not be severe. Bone changes appear which are probably the result of a combination of rickets and the loss of large amounts of ingested calcium as hydrates may be impaired as may be that of proteins.

The qualitative Van den Bergh test shows an immediate direct reaction. The urine contains no urobilinogen; it does contain large amounts of bile pigments.

It is important to realize that every one of these infants should have an abdominal exploration. Of 45 cases mentioned by Ladd and Gross[5] 9 were amenable to surgery. Without surgical correction the course is slowly but progressively down hill. Most

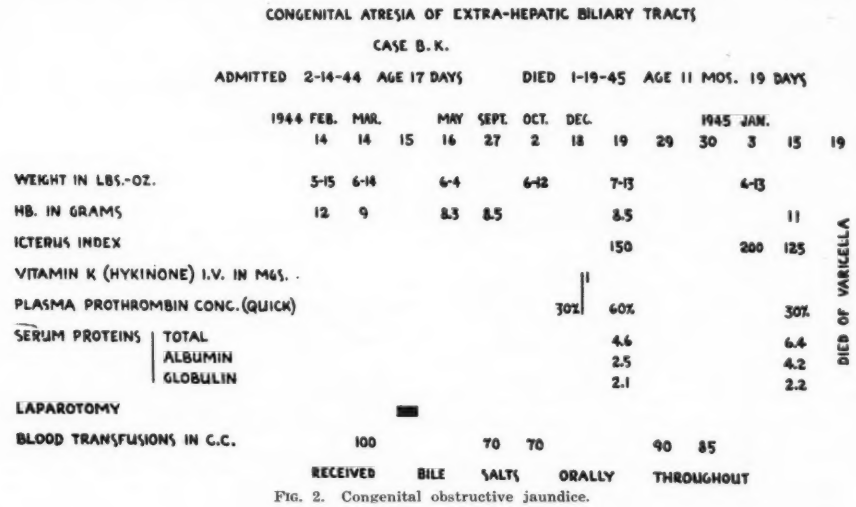
CONGENITAL ATRESIA OF EXTRA-HEPATIC BILIARY TRACTS
CASE B. K.
ADMITTED 2-14-44 AGE 17 DAYS
DIED 1-19-45 AGE 11 MOS. 19 DAYS
1944 FEB. MAR. MAY SEPT. OCT. DEC. 1945 JAN.
14 14 15 16 27 2 18 19 29 30 3 15 19
WEIGHT IN LBS.-OZ.
5-15 6-14 6-4 6-12 7-13 6-13
HB. IN GRAMS
12 9 8.3 8.5 8.5 11
ICTERUS INDEX
150 200 125
VITAMIN K (HYKINONE) I.V. IN MGS.
1
PLASMA PROTHROMBIN CONC. (QUICK)
30% 60% 30%
SERUM PROTEINS
TOTAL 4.6 6.4
ALBUMIN 2.5 4.2
GLOBULIN 2.1 2.2
LAPAROTOMY
BLOOD TRANSFUSIONS IN C.C.
100 70 70 90 85
RECEIVED BILE SALTS ORALLY THROUGHOUT
DIED OF VARICELLA

FIG. 2. Congenital obstructive jaundice.

soaps in the stools. I have never seen clinical symptoms of vitamin A deficiency. A remarkable aspect of these cases is that the infants do not develop hypoprothrombinemia until after several months have gone by, and even then the plasma prothrombin concentration usually does not drop below 20 per cent so that the coagulation time of the blood remains normal. When hypoprothrombinemia does occur it seems to be as much a result of inability of the liver to use vitamin K, probably because of the marked cirrhosis, as it is the failure of absorption. The prothrombin response after the administration of vitamin K in both of these cases (fig. 2 and 3) indicates impaired liver function. The plasma prothrombin concentration remained low in case B. K. even though oral bile salts were administered. This presumably might have improved the absorption of vitamin K from the intestinal tract. On the other hand, in case J. A. D. after twelve days administration of oral bile salts, the plasma prothrombin concentration rose to 70 per cent. After the appearance of biliary cirrhosis the metabolism of carbo-

die in the first year of life; a few survive several years.

CONGENITAL OBSTRUCTIVE JAUNDICE FROM INSPISSATED BILE OR MUCUS IN THE BILIARY PASSAGES

A clinical picture identical with that of congenital atresia of the bile ducts may be produced by obstruction due to inspissated material, presumably bile or mucus. The history in a few of these cases may indicate that the jaundice has been intermittent or at least has varied in severity and that the stools have at times contained bile. I have recently seen such a case in a 3 month old male infant. At operation no anatomical obstruction was found. The cystic, hepatic, and common ducts were probed. Following operation bile appeared in the stools and the jaundice subsided.

Ladd and Gross[5] reported 9 such cases. They recommended laparotomy and irrigation of the extrahepatic ducts with saline solution introduced by way of the gallbladder.

SEPTICEMIA OF THE NEWBORN INFANT

The streptococcus, staphylococcus, or colon bacillus is the most frequent pathogen. The portal of entry may or may not be apparent. Not uncommonly it may be an umbilical, skin, urinary, or upper respiratory infection. In some cases the origin has apparently been prenatal, the same bacteria being recovered from the blood of the mother and of the infant.

Symptoms may be present at birth or appear at any time in the newborn period. The clinical picture is quite varied and erratic but usually includes some combination of these symptoms: fever, failure to eat and gain, vomiting, diarrhea, jaundice, bleeding, enlarged spleen and liver, leukocytosis, immature leukocytes, anemia, nucleated erythrocytes. Metastatic infection in the skin or in various parts of the body such as the meninges, bones, and peritoneum is not uncommon.

The pathogenesis of the jaundice in these cases is not clear. In Dunham's series of 39 cases[3] 3 with marked jaundice had postmortem examinations. In 1 case the liver showed chronic hepatitis, in another diffuse fibrosis, and in the third central necrosis. Jaundice occurred in 14 of the 39 cases and progressive anemia in only 2; apparently the jaundice is not hemolytic in type.

Therapeutic measures include penicillin, sulfonamides, transfusions, and supportive therapy.

I have seen but 4 cases of septicemia in newborn infants that were studied sufficiently well to mention here. Only 1 became jaundiced. The blood culture showed a nonhemolytic streptococcus. The infant did not survive and permission for an autopsy could not be obtained.

BUHL'S DISEASE AND WINCKEL'S DISEASE

Mention of these varieties of jaundice in newborn infants is much more common in older than in recent medical literature. It is probable that they were actually sepsis. In recent years with more common use of blood cultures it is likely that these cases are being diagnosed as septicemia.

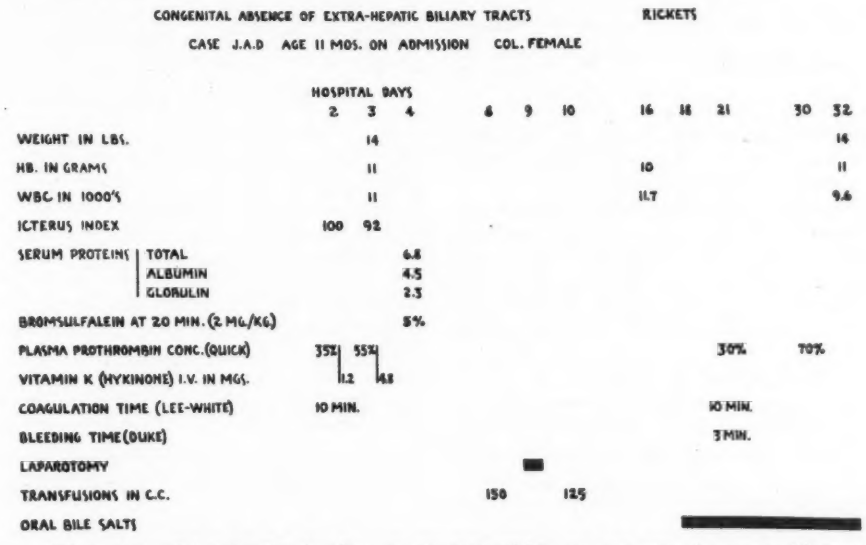
CONGENITAL ABSENCE OF EXTRA-HEPATIC BILIARY TRACTS
RICKETS
CASE J.A.D AGE 11 MOS. ON ADMISSION COL. FEMALE
HOSPITAL DAYS
2 3 4 6 9 10 16 18 21 30 32
WEIGHT IN LBS. 14 14
HB. IN GRAMS 11 10 11
WBC IN 1000'S 11 11.7 9.6
ICTERUS INDEX 100 92
SERUM PROTEINS TOTAL 6.8
ALBUMIN 4.5
GLOBULIN 2.3
BROMSULFALEIN AT 20 MIN. (2 MG/KG) 5%
PLASMA PROTHROMBIN CONC. (QUICK) 35% 55% 30% 70%
VITAMIN K (HYKINONE) I.V. IN MGS. 1.2 4.8
COAGULATION TIME (LEE-WHITE) 10 MIN. 10 MIN.
BLEEDING TIME (DUKE) 3 MIN.
LAPAROTOMY
TRANSFUSIONS IN C.C. 150 125
ORAL BILE SALTS

FIG. 3. Congenital obstructive jaundice. In the bromsulfalein dye test using 2 mg. per kilogram of body weight, none remains in the blood of a normal infant at twenty minutes.[10]

CONGENITAL SYPHILIS

Although pathologically the liver is one of the most frequent organs to be involved in congenital syphilis, jaundice is a rather unusual symptom. The pathologic lesion may be an interstitial or a gummatous hepatitis; the former is much more common.

The age of onset of the jaundice may be at any time in the first few weeks and may be as long as six weeks. There may be fever, leukocytosis, and other constitutional symptoms. The liver and spleen are usually enlarged. There may be an increase in the number of nucleated erythrocytes in the peripheral blood. Although this combination of symptoms may lead to confusion, the presence of associated manifestations of syphilis usually clarifies the diagnosis. The serologic condition of the mother is almost invariably positive. The serologic condition

of the infant may be negative; if positive, it is of definite help only if repeated observations show a rising titer. Roentgenograms of the long bones will frequently show changes typical of congenital syphilis. The qualitative Van den Bergh test may show either a biphasic or immediate direct reaction, depending on the stage of hepatitis. The urine may contain both bilirubin and an excessive amount of urobilinogen.

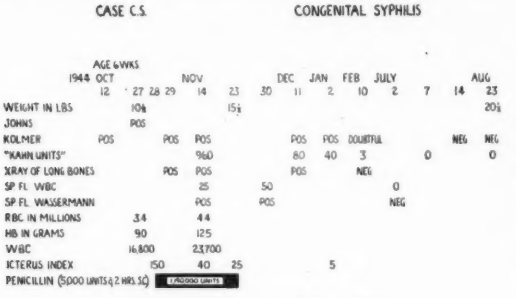

FIG. 4. Jaundice caused by congenital syphilis.

The results of the significant laboratory examinations in a typical case of jaundice in congenital syphilis together with the response of treatment are tabulated in figure 4. This infant was acutely ill and presented other manifestations of congenital syphilis.

INFECTIOUS HEPATITIS

With the rapid increase in knowledge of acute infectious hepatitis of the past few years it is not inconceivable that such cases may soon be diagnosed in the newborn period. I have recently seen a case of markedly severe hepatitis in a 2 month old infant. There was such marked liver damage that the plasma prothrombin concentration (Quick) was but 5 per cent. Although the jaundice was of but a few days duration, gastro-intestinal symptoms began in the first month of life. The case was very thoroughly investigated. The only lead found as to its etiology was that the intern who delivered the infant had acute catarrhal jaundice at the time! Moreover, one of the nurses who cared for the infant developed infectious hepatitis more than a month later.

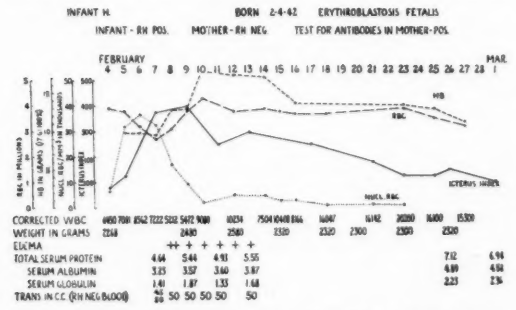

FIG. 5. Erythroblastosis fetalis due to Rh isoimmunization. The term "corrected WBC" indicates that the number of cells counted using acetic acid has been corrected for the number of nucleated erythrocytes.

ERYTHROBLASTOSIS FETALIS

There has been so much written about this disease in the past few years that the advisability of repeating a discussion of it here is doubtful. It might be well, however, to present 2 typical cases and point out some features they illustrate that I do not think are commonly appreciated. Case H. (fig. 5) represents the type seen in about 90 per cent of all cases in that its etiology is obviously immunization of an Rh negative mother by an Rh positive fetus. The etiology of case J. (fig. 6) is not so clear. Both mother and infant were Rh positive. However, Davidsohn[1] has pointed out that erythroblastosis fetalis may be due to Rh incompatability even though both mother and infant are Rh positive, because they may be of different Rh types. There are eight standard Rh blood types. A second possibility is that of maternal immunization by the Hr factor.[7] Blood from the mother and the infant in this case was not tested for either the various Rh types or the Hr factor. A third possibility is that of maternal immunization by the A or B agglutinogens of the fetus.[8] This could not have been true in this instance since the infant's blood was type O and could have contained neither A nor B agglutinogens. It is well known that the concentration of these agglutinogens may be low in the first few months of life. However, this infant was still type O when rechecked at the age of 11 months.

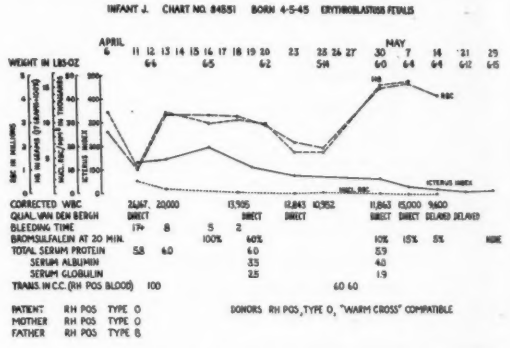

FIG. 6. Erythroblastosis fetalis of more obscure etiology. The blood count of April 6 was performed in another hospital. The blood smear was reported only as "multitude of nucleated RBC."

It will be noted that although case J. became more anemic, case H. developed a higher icterus index. Leonard[6] in a review

of 55 cases has recently offered conclusive evidence that there is no correlation between the degree of anemia and the degree of elevation of the icterus index. This suggests that there is some impairment of liver function. It is interesting that improvement in the bromsulfalein liver function test in case J. was closely correlated with the decline of the icterus index. The administration of vitamin K frequently does not improve the hypoprothrombinemia sometimes found in these cases[6]; this is further evidence of impaired liver function. In so far as I know there is no conclusive proof as to the exact etiology of the impaired liver function. Several suggestions that have been made are that it may be due to compression of liver cells of erythropoietic tissue, to fatty infiltration and fatty degeneration of the liver, or to liver damage due to the antigen-antibody reaction itself.

Leonard has also pointed out the lack of correlation between the degree of anemia and the degree of increase in the number of nucleated erythrocytes in the blood. The tendency for the anemia to recur is very well known. When this happens there is no simultaneous increase in the number of nucleated erythrocytes in the blood nor simultaneous elevation of the icterus index. This is well illustrated in the course of case J.

The jaundice in these cases assumes an orange-yellow hue. This may be the result not only of bilirubin but of a propigment of bilirubin, xanthorubin. As time goes by the jaundice may assume a greenish tint due to the oxidation in the tissues of these pigments to biliverdin.

CONGENITAL HEMOLYTIC JAUNDICE (FAMILIAL SPHEROCYTOSIS)

A crisis of congenital hemolytic jaundice is usually considered extremely rare in the newborn period. Fallon,[4] however, has recently described several cases under age 2 months.

KERNICTERUS

A minor percentage of newborn infants who suffer jaundice show mental and neurological changes. At autopsy the brain shows degeneration plus deposits of bile pigment. These changes are more marked in the nuclear masses, particularly the basal ganglia. This condition has been called kernicterus. It is almost exclusively associated with hemolytic anemia of the newborn.[2]

I have seen only 2 cases of kernicterus; both followed erythroblastosis fetalis. I have seen other cases in which either or both the anemia and jaundice were more marked which did not develop kernicterus. Yannet and Lieberman[11] stated that there is no correlation between the severity of the anemia and jaundice and the occurrence of cerebral damage.

It does not seem that kernicterus should be classified as a separate type of jaundice in the newborn, but rather as a complication, particularly of erythroblastosis fetalis.

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ABSTRACT OF DISCUSSION

Dr. Jack Hild, Houston: The interest manifested by Dr. Salmon in blood dyscrasias in infancy is reflected in the excellence of the resume he has just presented. It should impress upon us the fact that jaundice is not a disease but is a clinical manifestation, the cause of which must be determined in each individual case. The very frequency of physiologic jaundice mentioned by Dr. Salmon may be a stumbling block and cause serious delay in making a correct diagnosis. Every jaundiced baby should be closely observed and should be given the benefit of necessary laboratory determinations. The appearance of the jaundice or, of even more importance, the change of appearance from day to day or over a period of hours may in itself be practically diagnostic. Valuable information can also be obtained by observing the stools. Other observations of importance are pulse and temperature, occurrence of vomiting, weight loss or weight gain, abdominal distention, and enlargement of the liver. These clinical observations alone should help to classify the jaundice as obstructive or nonobstructive. Laboratory determinations are of utmost importance, but there should be no feeling of frustration if elaborate facilities for laboratory work are not available. Almost any hospital or clinic can perform the tests that will corroborate or add to the clinical observations and results in a correct diagnosis, which is essential if proper therapy is to be instituted. Kernicterus is an interesting complication. Its unsuspected presence may explain some of the obscure neurologic findings that occur in later infancy.

EARLY AMBULATION BEGAN IN 1899

In the United States early rising following abdominal surgery was first practiced successfully in 1899 by E. Ries of New York. Most of his patients, including those with hernias, were out of bed on the second day. He found that wound separation and eventration were not more common than with long confinement in bed. One of his colleagues, Boldt, reported in 1907 that he had knowledge of more than 1,000 patients who had been treated by early postoperative ambulation with good results.—Rudolph Marx, M. D., West. J. Surg., July, 1946.

THE PREVENTION OF SYPHILIS IN THE NEWBORN

CHESTER NORTH FRAZIER, M. D.
GALVESTON, TEXAS

The importance of syphilis to the public health is determined by its prevalence in a population. The amount of congenital syphilis necessarily depends upon the amount of acquired syphilis. The prevalence of syphilis in Texas is such as to make the protection of the newborn a major problem in the control of this disease.

Although the prevalence of syphilis in the female is not accurately known, its distribution in the male population between the ages of 21 and 35 years has been accurately measured in the examination of selectees for military service during the war just closed. These figures afford an approximate estimate of the frequency of infection in the female population.

According to the published figures,[13] 53.4 out of every 1,000 white males in Texas between the ages of 21 and 35 years have syphilis. In the Negro population of the state, 343.2 per 1,000 are infected. The prevalence rate for both white and Negro males is higher in only one other state in the union. The best rate for white males in any state is 6.4 per 1,000 of population, and for Negro males, 91.8 per 1,000. The rates in general for the entire United States are 17.4 per 1,000 for white males between the ages of 21 and 35 years, and 253.3 per 1,000 for Negro males. The position of Texas is indeed not enviable. It is impossible to estimate the cost of this disease to the economy; a burden which all must share.

The prevention of syphilis in the newborn is a problem essentially of prenatal care, and depends upon the detection of the disease in the pregnant woman usually by serologic examination of the blood. Accordingly, all pregnant women, whatever their social status, should have serologic tests made as early in pregnancy as possible. The earlier in gestation the disease is discovered and adequately treated, the better are the chances for a normal child. Treatment will prevent syphilis in the newborn in most cases, provided it begins early in pregnancy, continues regularly, and is of the proper kind and amount. Even when given late in pregnancy, treatment is remarkably efficacious as a preventive measure.

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The work described in this paper was done under a contract recommended by the Committee on Medical Research between the Office of Scientific Research and Development and the University of Texas.

Read before the Section on Obstetrics and Gynecology, State Medical Association of Texas, Annual Session, Galveston, May 8, 1946.

It is not enough, however, to make sure that serologic tests of the expectant mother give negative results. It should be remembered that syphilis may be, and frequently is, contracted during pregnancy. Under such circumstances, the identification of the primary lesion, if one be present, can be made by demonstrating the causative organism on the surface of the lesion by dark field examination. Negative serologic tests before the appearance of the primary lesion, or during the early days of its presence, are no guarantee against infection of the fetus. Unrecognized, the disease will progress to its most infectious stage during a few short weeks. Only by frequent and thorough examination of the external genitalia can infections acquired in pregnancy be recognized. During the past three years, I have been impressed by the number of seronegative cases of primary syphilis which have been detected in an alert antenatal clinic.

Since the days of Jonathan Hutchinson,[7] it has been recognized that pregnancy exerts a modifying influence upon the clinical course of syphilis. The infection may be suppressed sufficiently to reduce the disease to a low clinical level. Hence, minor abnormalities of the genital mucosa, if subjected to dark field examination, may be found syphilitic. Such lesions occur not infrequently in the local population. In fact, they occur so often, the obstetrical service is ever aware of the possibiilty.

If resistance to syphilis in a woman is enhanced by pregnancy, so much can not be said of the fetus. Before women were treated regularly for syphilis during their pregnancy, this disease was considered by Williams[14] to be the largest single cause of fetal mortality. It was his impression that a third of all fetal deaths were from this cause.

There is a prevailing misconception that pregnancy affects the serologic reaction for syphilis. It can be stated that pregnancy is not a cause of biologic false-positive Wassermann reactions. A corroborated positive test is an indication of syphilis in the pregnant woman, except under circumstances known to cause false-positive reactions, such as, among others, malaria[9] and the prophylactic inoculation against smallpox.[11] Neither does pregnancy act to reduce the titer of syphilitic reagin in the blood. In early syphilis the titer is quite as high in a pregnant woman as in one who is not pregnant.

It is also essential to know the significance of positive serologic tests on the cord blood. In this case, positive reactions are usually a measure of reagin carried across the placental barrier from the mother's blood. As such, they indicate the disease in the mother and not in the infant. Although not a re-

liable criterion of syphilis in the infant, the test on the cord blood is a valuable procedure for the diagnosis of syphilis in an otherwise untested pregnant woman. It is, therefore, highly desirable that the test be made in all cases at the time of delivery. Being positive, it affords presumptive evidence of syphilis in the infant; but not as good evidence as was once thought.[12] It was formerly assumed that fully 80 per cent of infants whose cord blood is positive have congenital syphilis. Perhaps a more accurate estimate is in the neighborhood of 14 per cent. When the test is positive, however, the infant should be examined serologically at intervals of not more than one month until it is at least 3 months old, and preferably 6 months old.

At the time of birth, a positive reaction on the blood of the infant is no more reliable as an indication of congenital syphilis than is a positive reaction on the cord blood. At this early period of life, a positive reaction is usually due to reagin from the blood of the mother, and as such it is transient in character.

As long ago as 1915, Fildes[5] initially observed that the presence of complement-fixing antibodies in the cord blood of the infant is evidence of syphilis in the mother rather than in the child. Subsequently, Cruickshank[2] learned that blood of the infant which gives a positive complement fixation reaction at birth may become negative with the passage of time and is therefore of little value in assessing the presence of congenital syphilis. In 1929, Lamez[10] confirmed the transitory positivity of the Wassermann reaction and asserted that should the reaction become negative in the first weeks of life and remain so, the child should be considered free of syphilis, provided he remains healthy. At about the same time, Dunham[3] showed that the disappearance of complement-binding substances can be measured quantitatively. It remained, finally, for Faber and Black,[4] and for Christie[1] to clarify the meaning of the positive complement fixation reaction in the infant's blood in the first few months of life by applying a quantitatively titered reaction as an accurate method of diagnosis.

The advantage of the quantitative over the routine qualitative test is that it provides a measure, on the one hand, of the decrease in titer of the circulating reagin, which has passed through the placenta, as it disappears from the blood of the infant; and, on the other, of the increase in titer of circulating reagin, should the infant be infected, and be elaborating its own reagin. From a series of quantitative determinations of reagin, it is possible to observe a trend in the behavior of this substance in the infant's blood. The tests will provide an indication of the source of reagin; whether it comes from the mother or from the infant. With this information, it is possible to arrive at an accurate diagnosis of congenital syphilis, as a rule within a period of three months after birth.

The risk of syphilis to the infant is proportional to the duration of infection in the pregnant woman (Kassowitz's law). The woman with active signs of primary or secondary syphilis is almost certain to infect her fetus; while the longer latency of disease endures, the less likely is she to transmit the infection to her offspring.

With the conventional methods of treatment, using metal chemotherapeutic agents, the best results for the fetus are obtained when treatment is begun early in pregnancy, that is to say, before the fifth month, and continued regularly to the termination of pregnancy. In a re-evaluation of the study, made several years ago, by McKelvey and Turner[12] on the effect of syphilis on pregnancy, Goodwin and Moore[6] have recently recalculated the original figures of these authors on the frequency of prenatal syphilis following various amounts of treatment. In the presence of early active syphilis in the mother, approximately 95 per cent of their infants almost certainly were infected when no treatment was given during pregnancy. Even when as much as 3 Gm. of arsphenamine were given, about 5 per cent were infected. It would seem also that the newer methods of intensive arsenical therapy with intravenous drip, or multiple syringe injection, in five to ten days, result in failure to protect the infant in approximately 15 per cent of cases.

On the basis of these figures, it seems that the best of the older methods of treatment, properly applied, fail to protect about 5 per cent of infants born of mothers in the primary or secondary stage of syphilis. When less adequately applied, from 30 to 50 per cent of the pregnancies end with congenitally syphilitic infants.

If the hazards and inconveniences to the mother of arsenical therapy are considered together with the amount of protection afforded the infant, the results in general of the older methods of treatment leave something to be desired.

My purpose in this paper is to call attention to the promise in penicillin therapy for the prevention of prenatal syphilis. The absence of toxic or other undesirable effects of this drug; the ease of, and the short time required for its administration are factors recommending the antibiotic agent. Should its potency as a measure for protection of

the fetus against syphilis approach that of older methods of treatment, it will at once become the treatment of choice.

From the observations thus far available, it would seem that metal chemotherapy may be abandoned in the future. On the basis of published reports and of experience not yet reported, penicillin has decreased the risk of infection to the infant beyond that expected from conventional methods of treatment.

Penicillin is given a crucial test when used during the primary or secondary stage of early syphilis. Left untreated under such circumstances, pregnant women at this stage of the disease would almost certainly give birth to syphilitic infants. Reports from the Johns Hopkins Hospital[6] and the University of Pennsylvania[8] show the satisfactory results in the infant when penicillin is employed under these conditions.

Sodium penicillin was administered intramuscularly in total doses of from 0.6 to 3.6 million units over a period of from eight to fifteen days. Single doses of 20,000 and 40,000 units were given every three hours. Following this treatment, there was but one fetal death in 61 pregnancies, and only one of 60 infants born alive and apparently normal later developed syphilis. This is a failure rate of 1.6 per cent. In the infant that treatment did not protect, the mother had developed a clinical relapse in the ninth month of pregnancy after receiving 1.2 million units of penicillin in the fifth month of gestation.

Further evidence of the efficacy of penicillin lay in the fact that approximately 20 per cent of the women were treated after the thirty-second week of pregnancy, and 54 per cent between the sixteenth and thirty-second weeks.

In the John Sealy Hospital of the University of Texas, 20 pregnant women have been treated with penicillin. Of these, 18 were in the primary or secondary stage of syphilis, and 2 in the period of early latency. Eight of the women in the early active stage of the disease were treated with a total of 0.6 or 1.2 million units of penicillin over a period of four and seven and one-half days, respectively. These have given birth to 9 infants. All have been observed for four months, and 5 of the infants have been under observation for seven months or longer. All remain normal. Two of the infants whose blood gave positive serologic reactions at birth had negative reactions at 4 and 7 months of age, respectively. One woman with secondary syphilis, who became pregnant near the time of treatment with 1.2 million units of penicillin, aborted in the seventh month of pregnancy, when her blood was still serologically positive.

If, as the number of cases increases, this degree of success continues, penicillin will have been unequaled in the prevention of prenatal syphilis by any other method of treatment. In this case the use of metal chemotherapeutic agents can be abandoned.

It is recommended, for the present, that in the treatment of women in pregnancy, sodium penicillin in physiological sodium chloride solution be given in doses of 20,000 units each every three hours to a total of 120 doses, or 2.4 million units. In the event of serological or clinical relapse this treatment should be repeated, as it also should in the presence of a persistently high serologic titer.

SUMMARY

The prevalence of syphilis in Texas makes the prevention of prenatal infection an important problem of public health. While older methods of treatment with metal chemotherapeutic agents protect the fetus in most cases if properly employed, penicillin promises to give even better protection. At present it is probably the treatment of choice for the pregnant woman. A total of 2.4 million units given in 120 injections of 20,000 units each over a period of fifteen days is recommended.

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The art and science of the practice of medicine is not complete without knowledge of the function of human personality and it is the duty of every practicing physician to acquire as much of this knowledge as possible.—Addison M. Duval, M. D., M. Ann. District of Columbia, Aug., 1946.

FROG TEST (XENOPUS LAEVIS) FOR PREGNANCY

C. B. SANDERS, M. D., F. A. C. P.
HOUSTON, TEXAS

L. Hogben, H. A. Schapiro, H. Zwarenstein, and C. W. Bellerly first experimented with the African claw frog from 1930 to 1934 in an attempt to use it as a test animal for pregnancy. Later in the United States, Abner I. Weisman, Christopher W. Coates, and their associates carried on experimental work with this frog to evaluate the method. The test is based on the original discovery of Ascheim and Zondek that gonadotropins will induce ovulation in animals such as immature white mice, rats, and rabbits.

In the frog test, female frogs, injected with concentrates of urine from pregnant women, will lay eggs within four to eighteen hours depending upon the amount of hormone present in the urine. The results of the test have been so excellent, and the method of running the test so simple and rapid, it appears that the test will be well worth using to supplant other animal tests used for the determination of pregnancy. The accuracy of the tests reported to date, where a large series have been carried out, is greater than 98 per cent. No false positive tests have been reported but the error occurs in false negatives when the patient has not been pregnant long enough to secrete sufficient gonadotropic hormone to give a positive reaction. In those cases reported as false negatives, the interval of pregnancy was usually less than ten days and when the tests were repeated later, positive results were obtained.

The African claw frog is imported from South Africa and is known as Xenopus Laevis. It lives entirely in water and only comes on land to feed. Before the frog can be used for pregnancy tests it must be examined and evaluated as to health and maturity.

In the laboratory, the frogs are kept in glass containers or tanks of water which are kept at approximately 70 F. They have to be fed ground beef heart or liver two or three times per week. The water must be changed before and after feeding and at other times when it gets dirty. The frog ovulates in darkness, therefore it should be injected late in the afternoon and kept over night for ovulation. After injection each frog is placed in a glass jar, in the bottom of which is placed a piece of hardware cloth raised from the bottom of the jar for a distance of approximately 1 inch, to prevent the frog from eating her own eggs after laying them. The jar should be covered with a mesh wire cover and weighed down so that the animal cannot escape.

The patient is advised to bring in the first specimen of urine which she voids on arising in the morning. Forty-five ml. of this urine is measured into a glass jar with a tight fitting screw top. The urine is acidified to a pH of 4 using 20 per cent hydrochloric acid and bromphenol blue as an indicator. To this acidified urine is added 5 ml. of a 20 per cent acid washed kaolin solution. The lid is then screwed on tight and the jar shaken in a shaking machine for ten minutes. Kaolin absorbs the hormone. The suspension is removed from the shaking machine and poured into a 50 ml. lusteroid centrifuge tube. It is then centrifuged for five minutes and the supernatant fluid is poured off. To the kaolin in the bottom of the tube is added 2 ml. of 10 normal sodium hydroxide which is mixed well with the kaolin and shaken. The specimen is again centrifuged and the supernatant fluid containing the hormone is poured into a smaller tube, acidified to a pH of 6, using 5 per cent hydrochloric acid and nitrazine paper as an indicator. There should be approximately 2 to 2.5 ml. of fluid containing the hormone for injection into the frog. Frogs should be selected which have bulging lungs and a purplish red cloaca since it is believed that these are the ones which have full egg sacs. The frog is removed from water by a net or with bare hands and is wrapped in a towel since it is slick and slimy and hard to hold. Injection is made into the dorsal lymph sac in the mid line approximately 10 mm. from the tip of the backbone. Injection should be made slowly so as not to cause a reversal of the lymph flow and thus invalidate the test. Care must be taken not to stick the needle into body cavities where it will puncture vital organs and kill the frog. If the specimen contains hormone the frog will begin to lay eggs within four to eighteen hours after injection. The frog should be kept in the dark and quiet while running the test since it has been shown that too much light will inhibit the laying of eggs. If at the end of eighteen hours the frog has not passed eggs, the test is negative. If the physician believes that the frog is not functioning right, he can follow up his original injection with an injection of a specimen known to contain hormone and the frog will lay eggs. If she does not lay eggs she should be discarded. It has been suggested that two frogs be injected for each test, which would be more reliable since each frog varies in sensitivity to the hormone. One frog should be kept for each

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test per month. Frogs which are injected with specimens not containing hormone should be rested for one week and then they can be used again. Frogs which lay eggs must have a rest period of one month before being used again. Frogs which have been recently fed should not be injected since they regurgitate their food and its presence in the water will obscure the eggs.

To date I have run 150 tests for pregnancy and have missed 2 cases in which the patient was pregnant and the animal did not lay eggs. Repeating the tests on these patients ten days to two weeks later gave positive results. I believe it is a simple, rapid, and accurate test at the present time and am enthusiastic about it.

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ABSTRACT OF DISCUSSION

Dr. Ellen D. Furey, Beaumont: Until a consistently accurate diagnostic test for early pregnancy is achieved there will continue to be dissatisfaction attendant upon any such test revealing even occasional irregular results. Dr. Sanders' experience with the frog test agrees with the majority of reports as to its high efficiency. One report in the January, 1946 *American Journal of Clinical Pathology* records only an 86 per cent accuracy. The concentration of the hormone apparently is a great factor in the success of the test. The standardization of the test animals likewise is an important factor. It is interesting to note that no false positives are reported.

I would like to know how the frog test has worked out in cases of ectopic pregnancy where the hormone concentration is usually low.

One must consider the rapidity and accuracy of the results as well as the lack of odor in the test animal as outweighing the problems of adequate housing of the frogs, the handling of slimy frogs, the care and experience necessary in proper injection, and the time required in concentrating the urine.

I wish to thank Dr. Sanders for presenting these useful data as a step along the way toward attaining the goal of a perfect test for the diagnosis of pregnancy, a test which combines accuracy of results with a degree of facility in performance.

Dr. John J. Andujar, Fort Worth: This presentation of the frog test for pregnancy is most complete, and Dr. Sanders deserves our thanks for giving us his valued experience. About ten years ago, an effort was made to popularize this test, but great difficulty was encountered in breeding these frogs in the United States. Apparently it required one or two years for them to mature sufficiently for clinical laboratory use, and the frogs were unable to propagate in adequate numbers. This made the test dependent on the fluctuations of the import trade, and I am wondering whether Dr. Sanders has been able to solve the problem of breeding the frogs in this country.

Dr. B. F. Stout, San Antonio: I would like to know how long it would take to prepare ten samples of urine as outlined by Dr. Sanders for injection of the frogs.

Dr. A. O. Severance, San Antonio: I should like to ask Dr. Sanders what is the size of the population of the frog colony which he finds necessary to maintain adequately to carry on the pregnancy test.

Dr. Sanders, closing: I have not had any experience in running the test in known cases of ectopic pregnancy. I do not raise the frogs but buy them from an importer. It does not take much more time to prepare ten samples of urine for injection than it does one sample using the standard method for preparing the specimens. As mentioned in the paper above there must be at least one frog for use per test per month and it has been suggested that two frogs per test per month would be better. During the coming year I hope to be able to run comparative tests using frogs and other accepted animals so that I may determine for myself the degree of accuracy of the test as compared with other standard animal tests for pregnancy. I wish to thank all the members of the section for their discussions and interest in the paper.

INTERSTITIAL IRRADIATION THERAPY IN CARCINOMA ORIGINATING AT THE LIMBUS

REPORT OF TWO CASES TREATED WITH RADIUM ELEMENT SEEDS

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When irradiation as a therapeutic measure in malignant epibulbar tumors is considered, several factors are involved: first, the extent of the malignant infiltration; second, the necessary dosage lethal to tumor cells in the involved area; third, the importance of the required dosage not injuring intraocular structures, especially the lens; fourth, the method of application.

If the carcinoma is limited to the anterior part of the eyeball and has not invaded the globe, the orbit, or the lymphatics, radium therapy can be used successfully. The origin is usually at the limbus where there is a transition from the conjunctival epithelium to the corneal epithelium and a down growth of the cell process occurs at this point. Bowman's membrane and the sclera offering considerable resistance to the penetration of malignant processes, the tumor tends to spread laterally rather than invade the eyeball. This explains the tendency of the growth to stay localized for a long time, and undoubtedly has played an important role in the many successful results reported after using irradiation therapy.

Pack and Taber introduced into the United States the plan of uniform platinum-filtered radium seeds which Sluys, of Belgium, had first employed. In an article written in 1937 they stated, "Although we have found the sheath needles containing the platinum-filtered radium cells eminently satisfactory in most cases, there are occasional indications for the use of even shorter radium foci. This need was met in times past by the purchase of gold radon seeds. As a substitute, we planned the construction of a radium

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element seed which would constitute a permanent addition to the supply of radium and could be used repeatedly without appreciable loss in strength or value."

This seed is really a tiny tube with an eyelet of smooth bore at one extremity through which the thread for removal is inserted. The dimensions are as follows: over-all or external length, 7.50 mm.; active or internal length, 3.27 mm.; external diameter, 1.20 mm. The filtration or wall-thickness is 0.3 mm. of platinum (10 per cent iridium-platinum). The filtration value is therefore the same as for the ordinary gold or platinum radon seeds and the tables of dosage computed for the latter are equally applicable in the case of the radium element seed. The wall thickness of 0.3 mm. platinum is sufficient to filter out 97 per cent of the hard beta rays while 97.6 per cent of the gamma rays are emitted. The soft beta rays are totally absorbed. Favorable experience with interstitial irradiation encouraged utilization of a similar procedure in certain malignant tumors of the eyeball.

The proper dosage lethal to a cancerous growth within a given area can be fairly accurately estimated in the interstitial application of the radium element. By virtue of the inverse square law, the intensity of radiation at a given point is much greater on contact with the involved area than when the target-skin distance is 5 to 50 cm.

As beta rays are less penetrating than gamma, theoretically they seem more suitable for application near the lens. However, it is found by experience that gamma radiation, if delivered from a small point source, does not produce a reaction unfavorable to intraocular structures. Most of the cataracts from radiation have resulted after large doses of roentgen-rays or radium without adequate protection having been provided. This is especially so when the lesion is rather extensive and requires a large point source to produce the desired effect on malignant tissues.

If the progress of the disease is not halted, loss of vision and even death can result. Therefore, radiation therapy must be limited to malignant processes which have not invaded the eyeball or which have not progressed beyond the equator of the eyeball or into the orbit, if preservation of the eyeball and vision is under consideration.

The 2 cases reported in this paper were subjected to the interstitial application of radium element seed containing 1.33 mg. These seeds were inserted in pockets made between the sclera and conjunctiva and sutured in place. They were left in situ for a definite length of time, depending on the size of the lesion. The rapidly diminishing intensity of the gamma rays, according to the inverse square law, insures minimum effect on distant normal structures with maximum effect on the tumor and tissue adjacent to the radium seed. The dosage used in the cases reported was estimated by Dr. Asa Beach.

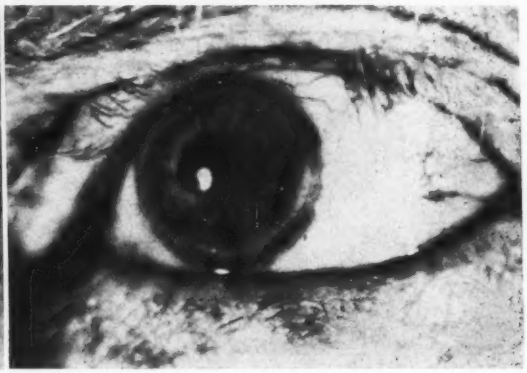

FIG. 1. (Left) CASE 1. Original appearance of limbal tumor squamous cell epithelioma, grade 2, Broders.

(Right) CASE 1. Appearance five years after excision and interstitial application of two radium element seeds.

Various methods of applying roentgen-ray and radium therapy to tumors of the cornea and conjunctiva have been devised and according to many reports have been used successfully. (See references.)

CASE REPORTS

CASE 1.—H. E. R., a white man, age 62, whose occupation was a watchman, about December 1, 1940, first experienced a burning and stinging sensation in the left eye. He noticed a small gray tumor near the cornea on the temporal side. This tumor grew rapidly and six weeks later the patient sought medical advice.

His family history was negative, with no history of cancer.

On January 11, 1941, an examination of the left

eye revealed a firm, adherent, grayish, oval-shaped tumor 6 by 4 mm. and 3 mm. thick, located at the limbus at about 3:30 o'clock. Vascularization was plentiful. Intraocular examination of the left eye revealed that the lens had a few small spoke-like opacities; the fundus was normal. Vision was 20/30 in the left eye. The right eye was apparently normal with vision 20/20.

On January 14, the growth was removed under local anesthesia with a diathermic surgical needle. The base on the cornea and sclera was also touched with the high frequency cautery. The resulting exposed scleral area was covered with a conjunctival plastic.

A pathological report from A. O. Severance of the Nix Hospital Laboratory, was as follows:

"*Gross.*—The specimen consists of a small oval bit of tissue 6 mm. in its greatest diameter and 3 mm. thick. In the center there is a raised, slightly brownish tumor. Grossly the tumor appears adequately excised.

"*Microscopic.*—The section shows tumor cells arranged in broad anastomosing sheets, and large and small masses which show considerable keratinization and intercellular bridges. The individual cells vary considerably in size and shape; some are tumor giant cells; all have eosinophilic, finely granular cytoplasm and round to oval vesicular nuclei with large nucleoli. Mitotic figures are quite frequent. Some are atypical. Mitoses vary from 0 to 3 per high power field, and average less than 1. A few epithelial pearls are seen. The tumor extends to the edge of the incision on both sides and the base in several sections. The tumor is in contact with the overlying epidermis and has replaced it in the center. A few inflammatory cells are seen in the stroma. This is a grade 2 (Broders) squamous cell epithelioma."

Since it was impossible to tell whether or not cells had invaded the sclerotic trabeculae, perivascular, or perineural spaces, radiation was considered advisable.

On January 21, two radium element seeds of 1.33 mg. strength were inserted under the conjunctiva and held in place by sutures. The reaction was most satisfactory. It was so calculated that the patient received 128 mg. hours of gamma irradiation on an area of 0.9 cc. Although five years have elapsed there has been no recurrence of the epithelioma. During the last six months the lenticular opacities have increased with a resulting diminution of vision to 20/100 corrected to 20/40 by a minus 4.00 lens. This increase of lenticular clouding could hardly be caused by exposure to radium emanations four and a half years previously, especially since some opacities were present prior to irradiation.

CASE 2.—F. H., a white man, age 60, was hit in the left eye during a fight twenty-three years ago. A few years later this eye began to get red and a tumor was noticed growing on the eyeball. About eight years ago he went to the Robert B. Green Hospital and had a pterygium removed from the left eye. A year later the pterygium returned and was removed again "by an electric needle." A few months later the pterygium had returned again. The eye remained red and the tumor gradually grew larger. He then consulted another doctor who told him that the growth appeared to be of a cancerous nature and advised the removal of the eyeball. The vision had always been poor in the left eye.

His family history revealed that one brother died of cancer of the lung, one sister died of cancer of the stomach, and a nephew died of cancer of the lung. The patient himself had had no particularly severe illnesses. He had always smoked excessively.

Upon examination March 27, 1944, a rather firm semi-transparent growth was seen growing over the cornea in a pterygium-like manner and extending opposite to the pupillary border. There was also considerable thickness and redness of the conjunctiva which extended over an area 1 by 2 cm. This area was elevated about 1 mm., was firm to the touch, and adherent to the sclera. The preauricular gland was not enlarged. A small section of the pterygium-like mass was removed and sectioned. Right eye vision was 20/20. Left eye vision was 20/40 (corneal scars). The fundi were apparently normal.

FIG 2. (Left) CASE 2. Diffuse carcinomatous infiltration of the conjunctiva. Squamous cell epithelioma grade 1, Broders.

(Right) CASE 2. Appearance one year after irradiation. There is corneal scarring and conjunctival thickness, but no return of the epithelioma is apparent.

Dr. Severance reported as follows:

"The sections show tumor cells arranged in small to medium sized masses and surrounded by a small amount of fibrous connective tissue. The latter contains a moderate number of inflammatory cells, particularly round cells. The tumor contains frequent epithelial pearls and it is very well keratinized. Intercellular bridges are readily made out. The individual tumor cells vary moderately in size and shape, have eosinophilic granular cytoplasm, and have round or oval moderately chromatic or vesicular nuclei. Some of the nuclei have large prominent nucleoli. There are a few large hyperchromatic nuclei. Mitotic figures are infrequent. This tumor is a well differentiated squamous cell epithelioma. I believe it would fit Broders' classification of grade 1."

Although this type of tumor is not considered radio sensitive, it was thought feasible to radiate the area involved with radium seeds. Four radium element seeds of 1.33 mg. strength were implanted between the sclera and the conjunctiva. The sutures holding the needles were tucked behind the lid at the outer canthus, the eye being bandaged firmly to hold the lids together. The area was irradiated for a period of forty-eight hours, the dosage being 250 mg. hours.

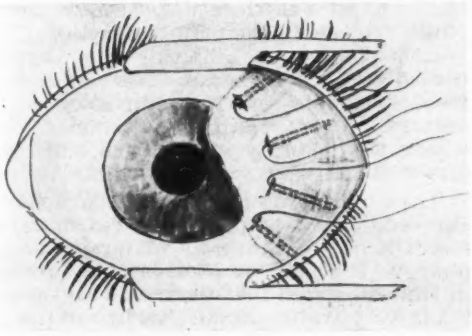

FIG. 3. Diagrammatic sketch showing subconjunctival application of radium element seeds.

One year has elapsed since irradiation and no return of the growth has occurred. There has been no reduction in vision nor has any lenticular clouding in the left eye been observed. A cure cannot be claimed in this case because the minimum time limit of five years has not been complied with.

CONCLUSIONS

The interstitial application of radium element seeds to primary malignant tumors originating at and limited to the anterior surface of the eyeball has certain definite advantages over other methods of irradiation. However, the patient should be hospitalized and supervised during the time the radium is left in situ. Two cases of carcinoma originating at the limbus, as described above, were subjected to interstitial radium element therapy with apparently successful results.

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ABSTRACT OF DISCUSSIONS

Dr. C. M. Griswold, Houston: I desire to compliment Dr. Sykes on his timely paper and the good results he has obtained.

From a diagnostic standpoint let me emphasize that any isolated, elevated growth at or near the limbus with a white leukoplakic surface should be considered epithelioma and treated as such.

There are essential technical differences in the use of radiotherapy in malignant growths of the orbit as compared with other structures of the body in which these agents are in widespread use. The problem of dosage is most important. Radiotherapy, in the average case of cancer, is not conservative, and a degree of fibrosis at the site of the growth is of minor importance, but the reverse is true in lesions of the eye. The lesions are, as a rule, well localized and extreme conservation of the normal structures is of paramount importance. Fortunately, cancer of the eyeball responds in a satisfactory manner to a relatively small amount of radiation as compared with the amounts required to treat carcinoma elsewhere; consequently, complicating fibrosis is minimal and full use of the eye is the usual outcome.

In 30 cases of primary carcinoma of the conjunctiva which I have treated a technique has gradually been developed of "small dose treatment." Equally good results have been obtained with heavier doses of radium than are now advocated. In fact, 10 of the patients in the 30 under scrutiny received an average of approximately 250 mg. hours of gamma radiation at a distance of .5 inch. The 20 patients receiving the small dose treatment averaged 45 mg. hours of beta radiation with equally satisfactory results.

The technique used in all of my cases is as follows:

The patient is placed on his back with a pillow under his head for comfort. The eye is anesthetized with 2 drops of butyn and the lids are retracted with spring lid retractors. Three or four monel metal steel needles, each containing 5 mg. of radium, are placed in a horizontal position 1 mm. apart on a strip of Scotch tape. A thin rubber dam covers the Scotch tape on the side next to the eye and a strip of adhesive tape is attached to the radium needles outwardly and extends vertically so as to attach itself to the upper and lower lids. This holds the radium in position and the adhesive tape is carefully attached to the lids so that the radium plaque lightly or almost touches the lesion.

The problem of immobilizing the eye is satisfactorily managed by having the patient focus at a fixed point on the opposite wall. The radium is left in place forty minutes at a time. Usually four such exposures are given at daily intervals. A drop of butyn is instilled in the eye two or three times during the exposure and every three or four minutes the eye is flushed with 2 per cent boric acid solution to counteract dryness. These instillations do not disturb the position of the radium and the patient never complains of real discomfort.

Within three or four days after the radium therapy has been completed the tumor and adjacent conjunctiva begin to show congestion and this reaction to the radium rays increases in intensity until the twelfth or fourteenth day. Resolution then begins and by the time six weeks have passed there is little conjunctivitis present. No iritis has been noticed. In 1 case where glaucoma existed there was a marked flare-up of this condition which eventually subsided.

The patient is advised to wash the eye several times daily with 2 per cent boric acid solution following treatment.

After the reaction from the radium has cleared, no sign of tumor remains. The conjunctiva at the site treated is somewhat thinner, less vascular, and smoother than the adjacent tissue. So far as we can learn, there has never been a local recurrence.

In 1 case metastasis to the preauricular node on the same side of the face occurred, but this case was the one where the original lesion was situated below the inferior limbus and had been surgically removed twice before receiving radium.

The good results obtained in these cases are largely due to the fact that they are seen and treated early.

Dr. Malcolm K. McCullough, Dallas: Primary epithelioma of the conjunctiva occurs most commonly at the limbus or zone of epithelial transition. These tumors are fortunately rather rare and are identical in structure with that of squamous epitheliomata elsewhere, though basal cell carcinoma has been reported as arising in this same location. Duke Elder states that on the whole, in comparison with carcinomata elsewhere, these tumors are relatively mildly malignant, in that they continue to be superficial for a long period of time. He states that the attachment to the globe may be small and that extension outward is much more rapid than inward, due to the resistance of the cornea and sclera, both of which are deficient in lymphatics. They are slow growing and are not prone to invade the neighboring lymph glands. Extension of the growth may occur superficially over the cornea and sclera or the interior of the eye may be invaded through the cornea or through Schlemm's canal.

The treatment of carcinoma of the limbus is the same as that of malignancy elsewhere, surgical removal followed by radium or roentgen therapy. Since these tumors are not highly malignant and do not tend to metastasize early, the small ones should be removed and treated with radium as described by Dr. Sykes. However, if the growth is extensive, the globe should be removed and possibly the orbital contents as well.

We are deeply indebted to Dr. Sykes for his able presentation and commend him for his skill in handling the cases reported.

TRAINEESHIPS IN CANCER OFFERED

The National Cancer Institute, Bethesda, Md., will award between seventy-five and one hundred traineeships in the diagnosis and treatment of cancer during the fiscal year from July 1, 1946, to June 30, 1947, according to *The Journal of the American Medical Association.* A stipend of from $2,500 to $3,000 per year is available to accepted physicians. Minimum requirements are graduation from an approved medical school and one year internship in a hospital approved by the American Medical Association. Applicants must be under 40 years of age and be acceptable to the institution selected for training, with which they must make their own arrangements. Appointments, originally for one year, may be extended to a maximum of three years. Additional information may be secured from the National Cancer Institute.

ETIOLOGY OF OTOMYCOSIS

AN EXPERIMENTAL STUDY

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and
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Forty cases of otomycosis were studied clinically and mycologically for evidence on etiology. Most of them were seen in the outclinic, the rest in the private practice of Galveston physicians. Clinical data were recorded on each diagnosed case and a specimen of exudate sent to the mycological laboratory. There cultures were made and, where the quantity of material sufficed, a direct microscopic examination.

The condition is of limited geographic occurrence, but in tropical and subtropical climates it may constitute a major problem of otology. Ingram,[12] in Florida, and Trexler,[19] in Hawaii, stated that the incidence is heaviest in very warm climates and near the seacoast. Some feel that fungi might occur more widely than is recognized in the otitis externa of more temperate zones. Simms[17] quoted Siebenman to the effect that 1 per cent of all disease of the external ear in Germany is due to aspergilli.

Reported incidence in the United States is greatest in Florida (Gable[6]). The condition is frequently encountered in Galveston, where climatic conditions in many respects approximate those of Florida. We are told that practitioners upstate in Texas do not often find it. Amstutz,[1] reporting a case in Ohio, said that otologists of wide experience in that part of the country had not found and recognized a case.

Cases continue to occur throughout the year, though higher summer incidence is mentioned by Gill.[7] Causative influences such as swimming have certain seasonal tendency. Age, sex, or race exert no significant influence apart from an infrequency in children. Only 1 of our patients was a child, and otherwise the occurrence accorded roughly with age, sex, and race distribution of the clinic patient population.

Nearly all of our culturally positive cases yielded either A. niger or A. flavus, the former with about twice the frequency of the latter. Aspergillus was present so prolifically as to be demonstrable on direct microscopic examination as well. The mycology of otomycosis has been of similar pattern elsewhere. Tabulation of literature from various parts of the world indicates in seven reports the finding of these same two organisms, in

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another seven the A. niger only, in three aspergilli unspecified as to species, in one A. fumigatus, and in one a trichophyton.

Other saprophytic molds occurred now and then in our series, though rarely so prolifically as to show in the direct microscopic preparation. Once the scopulariopsis appeared in microscopic preparation and culture, and once again in culture only. Incidental fungi found in culture alone include penicillium, actinomyces, and another aspergillus, A. glaucus. Workers elsewhere mention similarly the incidental presence of A. sydowi, A. albus, A. nidulans, and species of penicillium, mucor, yeast, alternaria, trichophyton, mycotoruloides, monosporium, monilia, hormodendrum, actinomyces, and achorion.

Fungus involvement of the external ear has long been recognized. Mayer[13] reported finding aspergillus in an infected ear canal as early as 1844. Otomycosis usually has been considered a clinical rather than mycologic entity, for to a large extent it has to be diagnosed without mycologic laboratory findings.

Pronounced cases produce a plug of exudate that resembles wet, macerated newspaper pulp, filling the depths of the canal. From this exudate the fungus may be recovered, and in some instances the plug itself is visibly moldy and covered with black spores. Less typical cases do not display enough exfoliation to produce these features, and resemble scaling or weeping eczematoid lesions.

Comparing the severity of the lesion with fungus recoveries therefrom, we found that the fully developed clinical picture coincided in large degree with the positive mycologic picture. Cases that presented the typical symptoms with pulplike plug yielded cultures of A. niger or A. flavus, and the mold occurred so prolifically as to appear in direct microscopic preparation. Where material was sufficient to make a microscopic mount, the aspergillus structure appeared in all cases from which either of these fungi was recovered culturally. The culturally negative cases always presented negative microscopic findings.

In 9 cases in which cultures were positive for the A. niger, 5 had the characteristic clinical picture just mentioned, and the other 4 were not so described in the record as to show. Of 5 cases similarly positive for A. flavus, 3 were so described as to bring out this point and all 3 presented this picture. One with a mixture of both organisms showed the same. Of 20 cases that were culturally negative, 2 had been described as having this characteristic pulpy plug of exudate and 12 as lacking it. The others were not so described as to indicate or else were of questionable diagnosis.

Inasmuch as the fungus is richly and uniformly present in cases with the characteristic mass of pulplike exudate, and is not demonstrable in cases without it, it may be concluded that the fungus is itself responsible for this thick exudate. The matter is largely mold mycelium mixed with loose epithelial matter. From clinical appearances one gets the impression that the mycelium roots itself into the affected skin and rolls up epithelial tissue, which mixes with the discharged fluids and comes out in sodden masses. This accumulation leads to the more pronounced symptoms of the disease. Roosa[15] in 1870 expressed his belief that while other disease precedes, the formation of vegetable fungus in the ear leads to the symptoms that bring the patient to the physician.

Some factors that favor this prolific multiplication of fungus are evident. Water in the ear has been found responsible in some instances. We got the history repeatedly of recent swimming in the Gulf. The water may have planted mold spores, or it may have softened the tissue or surface secretions to support growth. Gordon[9] described an outbreak of otitis near Gatun Lake, Canal Zone, in which A. niger and A. flavus were identified. He regarded the wetting of the auditory canal by swimming as the principal predisposing factor, and after swimming in the lake was prohibited he encountered no new cases.

A contributing factor mentioned by Gill[7] and others is a lack of cerumen in the affected ear. We ourselves have noted this with some regularity. Cases of otomycosis exhibit a scantiness of cerumen, resulting from atrophy of ceruminous glands or the washing away of cerumen by persons cleaning their ears or by swimming. We have found that cerumen itself has definitely protective properties and can be utilized to relieve irritation in the canal.

The possibility occurred to us that cerumen might exert a fungistatic effect, retarding growth of fungi on the epithelium. We conducted a series of experiments in which cerumen was added to culture media. Concentrations varying up to 10 per cent in Sabouraud's agar failed to affect the growth thereon of aspergilli. In other experiments the inoculated spores were variously exposed to cerumen, and this did not in any case materially retard growth. The favorable influence of cerumen evidently is not fungistatic. A mechanical or otherwise protective influence may be exerted on the epithelium.

What we have known as otomycosis does not regularly present the clinical and myco-

logical findings just described. It did in only about a third of our cases. A milder form fails to exhibit this degree of exfoliation or in most cases the actual evidences of mycosis. It is spoken of as otomycosis because of a presumed association with fungus growth. The lesion without characteristic clinical and mycologic manifestations has been regarded as an earlier stage with all fungus elements buried in the epithelium and not discharged into the exudate taken for specimens. Failure to isolate fungi or other organisms hidden in the depths of inflamed tissue is common experience.

A different view is that conditions of other causation sustain the growth of fungi whose spores happen into their discharge. Chisholm and Sutton[4] spoke of the disease as secondary to pathologic conditions involving maceration of skin, eczema, furunculosis, or chronic discharge. A case of ours supports this conception by yielding different fungi at different periods. It is not likely that assorted fungi could invade the skin to initiate a lesion, and then so proliferate as to make themselves apparent only one at a time.

For several years this patient presented an eczematoid lesion of the ears, first weeping and later dry and scaling. Culture for fungi was negative. Itching persisted and an urge to probe the ear canal. As time passed a sense of fullness developed and hearing was impaired. A plug of exudate was removed from which culture and direct microscopic examination were positive for a species of scopulariopsis. Under treatment the condition cleared up. Over a year later the ear canal again filled up. Similar examination was made and A. flavus was isolated, with microscopic examination positive for aspergillus. Treatment was administered with subsequent disappearance of the fungus and without recurrence to date. Unless this were a sequence of different conditions, it must have been a lesion of other than mycotic origin which became contaminated with one fungus after another and thereupon assumed clinical manifestations typical of otomycosis.

Just what damage the body suffers from the presence of these fungi is not clear. Bristow[2] thought that the disease may consist in mechanical obstruction only, due to plugging of the external canal with mycelium. He cited a suggestion of Wiedman that the fungi might be ranked as pathogens if they cause only an obstructive impairment to function.

Gable[6] suggested penetration of deeper tissue through toxic or other irritative properties. Oshima and Church[14] described proteolytic enzymes of aspergilli which can digest native proteins. Possible influence of toxin finds repeated mention in the literature. Henrici[11] described such a toxin, which we have demonstrated in A. niger and A. flavus. These toxic and otherwise deleterious substances have not been shown to take part in the inflammatory process.

Some, including Gill,[8] Hatch and Row,[10] and Whalen,[20] think the pathogenic mechanism to be an outright infectivity. A. niger, A. flavus, or whatever fungus it may be, is presumed to invade the tissue and produce disease. The cases without demonstrable mycelial overgrowth are thought of as infected by a hidden fungus. The fungus is regarded to be infective for such host as other agents make susceptible, even if not an outright parasite.

Evidence for this hypothesis consists in the frequency with which the respective fungi are found, and in the fact that the disease yields to fungicidal therapy. Various fungicidal agents have been used for local application. Chisholm and Sutton[4] gave potassium iodide internally as well, but few others have found this of advantage. While our mycologic findings and therapeutic results accord with those of the supporters of this view, we are not convinced of such significance.

Our cases yielded well to treatment with preparations containing fungicides. Some cases of the series were treated with thymol in 1 per cent alcoholic solution and others with gentian violet in 2 per cent alcoholic solution; we prefer the latter as it is less irritating. Results were good both in cases having heavy fungus growth in the ear and in those without demonstrable presence of fungi. The efficacy of gentian violet in the treatment of fungus infections has been amply demonstrated, among others by two of us (Spiller, Sharp, and John[18]).

This therapeutic evidence would argue well for the condition's mycologic basis if the only action of the successful treatments were fungicidal, but most local applications so employed have other activity as well. While employed here to bring about exfoliation and removal of fungus elements in the depths of the epithelium, they are recognized to be effective too for the cure of nonmycotic lesions.

Such is our experience with gentian violet. Various inflammatory conditions of the external auditory canal, including recurrent furunculosis, yield to this application. We first tried it under the assumption that these conditions might be associated with persistent mycosis. Itching, scratching, and consequent secondary infection of the skin could well result from fungus infection. On the other hand, gentian violet is effective also for the treatment of bacterial infections

(Burke, Jessup, and Phillips[3]) as well as other inflammatory conditions. We do not feel that the efficacy of such treatment actually proves a great deal regarding the etiology of otomycosis.

The sort of evidence recognized as actual proof of a causal relationship is wanting. A recovered fungus has not afterward been made to reproduce the lesion in healthy tissue, nor is the same fungus regularly recovered. The several different fungi that have been recovered occur abundantly in nature as saprophytes, and there is no compelling reason to think that their sustenance in the exudate of otomycosis is not saprophytic.

There are familiar instances in which saprophytic organisms find conditions under which they may become infective. This occurs notably about traumatized skin. Enlows[5] believed the fungi are capable of attacking the epithelium of the ear but that trauma is necessary for the initial lesion.

Another situation, familiar among the bacteria, is that in which peculiarly pathogenic types exist within a saprophytic species. Strains of a serologically distinguishable group acquire invasive properties unknown to the rest. The existence of specially invasive otomycosis strains among the aspergilli would go far toward explaining their pathogenicity. By methods previously described by one of us (Sharp[16]) we explored that possibility. This method of approach was not especially promising, as serologic relationships among the higher fungi are broad and antigens are not highly differentiative.

So far as available antigenic preparations could discriminate, it appears that otomycosis strains were not a more closely related group than unselected strains of the species as a whole, whether of A. niger or A. flavus.

CONCLUSIONS

1. The fungi associated with otomycosis are ordinary saprophytes such as occur on the normal skin, usually though not always Aspergillus niger, or A. flavus. In localities where they abound, and under circumstances favorable to the germination of spores that gain entrance, these fungi may proliferate in the auditory canal.

2. Excessive proliferation there leads to the highly characteristic signs of otomycosis. A plug of thick pulplike exudate forms, which consists largely of exfoliated epithelium and fungus mycelium. This characteristic development may be regarded as a complication of prior pathologic conditions not shown to be mycotic.

3. The external auditory canal does not favor excessive fungus multiplication when normal, but only when its physiology is altered. Such alteration occurs because of discharge from the middle ear in acute or chronic otitis media, removal or lack of formation of cerumen, or changes in the anatomical structure such as follow injury or reconstruction in radical mastoid operations.

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ABSTRACT OF DISCUSSION

Dr. James B. Nail, Wichita Falls: The authors' scientific investigation and report on this subject has been most interesting and instructive. It has been my practice to make smears of all suspected fungus cases, and information given by the authors on this subject explains why patients with clinical appearance of fungus infections upon whom negative smears were found recovered by fungus therapy. Cultures on these patients would most likely have demonstrated the fungi.

Their report of the etiology is most logical. A pre-existing otitis with infection or irritation followed by trauma had never occurred to me. I have confirmed the authors' theory and found it correct by further questioning some of my patients after perusing their paper, which I received a few weeks ago.

It was interesting to note their observation that persons with abundance of cerumen were seldom afflicted with mycotic ear infections, and that preparations made from cerumen had no value as a therapeutic agent. In my experience 2 per cent Sulzberger's iodine powder has been a satisfactory therapeutic agent for aural mycosis. After removal of every particle of exfoliation and crust from the external auditory canal with cotton applications saturated with hydrogen peroxide, the canal is dried and the powder liberally insufflated into the ear. This treatment is repeated daily or every other day. If the fungus infection is complicated by an eczematous condition, 6 per cent lenigallol zinc ointment is smeared into the canal before the powder is insufflated.

Cultures and smears were made from 2 patients

with clinical appearance and symptoms of otitic mycosis. Both showed Aspergillus niger. After five days a heavy growth covered the media (Sabouraud's). At this time 2 per cent Sulzberger's iodine powder was liberally dusted over the surface of the growths in each culture tube and the procedure repeated in twenty-four and again in forty-eight hours. (Perforated corks were used in tubes to permit aeration.) The day following the last insufflation of the powder in the tube practically all appearance of the growth on the media had disappeared and smears made from the growths showed no fungi present.

I am not in position to comment upon the authors' suggested therapy of gentian violet as I have not had sufficient experience with it; however, I fully anticipate the therapy they suggest to prove quite as satisfactory as their valuable contribution regarding the etiology, and I am confident their suggestions will be a great assistance to us in dealing with mycotic infections of the ear.

EXTERNAL OTITIS

JAMES T. ROBISON, M. D.
AUSTIN, TEXAS

The external otitis patient forms a large percentage of an otological practice in the southern states. I say in the southern states for the reason that I once practiced in a northern city where there was a submarine base and almost without exception the few cases of external otitis I saw were in men who had recently been in southern waters in connection with their naval duties or, if the patient was a woman or child, in a navy family which had recently been in southern waters—usually the Caribbean region. That fact, plus the higher percentage of external otitis patients seen in the warmer climate, convinces me that geography plays a leading role in this condition. It is not only the temperature of the air but it is as much the result of the temperature of the water. The next most important factor is the absence of cerumen in the external canal. It is rarely the case for external otitis to develop in face of normal cerumen in the ear canal. This loss of cerumen usually comes about through repeated mechanical cleansing of the ear canal.

I have often thought that the cerumen glands may be destroyed by an active fungus infection of the canal, for on a few occasions I have seen young children who had an excess of cerumen develop an active fungus infection with edema of the canal wall, that is, the often seen black-white fuzzy fungus, and then after that was cleared up there was no return of cerumen. Another factor of importance is the wearing of headsets and head dresses that prevent the proper ventilation of the canal. This is seen in men who wear radio headsets and earphones and the Sisters of Charity. The ear canal being warm, dark, and moist makes it an ideal culture tube.

Read before the Section on Eye, Ear, Nose, and Throat, State Medical Association of Texas, Annual Session, Galveston, May 8, 1946.

The procedure of development of external otitis is usually as follows: First, a fungus infection occurs which acts to destroy the cerumen glands in the ear if there is much edema and swelling of the canal wall. The fungus infection is cleared up. The skin of the canal is dry and scaly because of absence of the cerumen. This results in an itching sensation and the patient scratches the canal —men usually using a match and women a bobby pin. This external trauma breaks the epidermal layer, and the external otitis is thus started. What organism, if any, is responsible I do not know. I have run cultures and smears on quite a few cases and the most constant organism in my smears has been a gram-negative bacillus, probably the Bacillus pyocyaneus. Often there is a gram-positive diplococcus or a monococcus. Rarely is there a mycelial thread or yeast organism. The more liquid the discharge or drainage the less likely is there to be a fungus type of organism present.

The types of this condition include first, the fungus ear. This ear itches and usually feels full. There may or may not be cerumen present. The fungi responsible may be the Aspergillus niger or funigatus or the white mucor corymbifer or monilia. If the patient has produced a reaction of edema and soreness of the canal wall through his scratching activities, I pack the canal with a strip of gauze about .25 inch in width and 2 inches long. This is packed in after thoroughly syringing the ear, cleaning it out, and thoroughly drying it. The patient is given a prescription for Burow's solution and instructed to keep the gauze wet with the solution by dropping 4 or 5 drops on the gauze every two hours and to return in four days. By then the edema and soreness has left and the canal is open. The canal is thoroughly cleansed again and dried and gentian violet applied. The canal is dried by blowing compressed air into the canal and then sulfanilamide powder is blown into the canal, as much for the drying effect as anything else. In fungus cases without painful canals I do not use the gauze and Burow's solution but only the cleansing and drying procedure plus the gentian violet and sulfanilamide powder.

The acute desquamative external otitis is usually bacterial in origin and the canal is filled with a soupy, sometimes greenish material. One must be sure and eliminate a perforated tympanic membrane in these cases. The skin of the canal wall is often edematous and acutely inflamed and some auricular adenitis may be present. The dermatitis may extend over the entire auricle and the temperature may be around 100 F. The patient is often in much pain besides his mental worry over a possibility of a surgical mas-

toid condition. Such a case is often bordering on a complication developing from the otitis such as erysipelas, furunculosis, or a chondritis of the ear. Treatment usually followed in the acute desquamative otitis is to cleanse the ear followed by swabbing the canal with merthiolate or 2 per cent mercurochrome. Then the canal is packed with a small gauze wick kept wet with Burow's solution every two hours by the patient. A prescription is given for an ointment consisting of ichthyol 1 dram, salicylic acid grains 10, zinc oxide grains 30, put up in 1 ounce of rose water ointment. Also a prescription for analgesic tablets is given. The gauze wick is allowed to remain in the canal for five days after which the canal has opened up and the pain has ceased. From then on I keep the canal cleansed, apply merthiolate locally, and have the patient use the ointment at night in the canal and on the affected part of the auricle.

The chronic desquamative external otitis is the most difficult of all to handle. The ointment named in the above paragraph has been of more help to me in this chronic form than any other single type of treatment. The chronic form is often a follow-up of the acute form. I do not recall ever seeing a chronic desquamative otitis which had normal cerumen in the ear canal. Among the things I have found of value in treating these chronic forms is the roentgen ray, sunlight, low carbohydrate diet, keeping the hands in gloves at night to prevent scratching the ears, and above all keeping water away from them. Many of the chronic forms will have periods of acute exacerbation in which treatment for the acute form is followed. When this acute exacerbation occurs it at times spreads under the tragus of the ear, into the postauricular fold, and may get into the groin region and other parts of the body.

Complications from external otitis consist of furunculosis for which cleansing and sterilizing the canal followed by gauze pack kept wet with Burow's solution is the treatment of choice in most cases. Sometimes one is called on to differentiate a furunculosis of the canal from an acute mastoiditis. If one is unable to see the tympanic membrane, this is more difficult to do, especially in children. The main point to remember is that the pain is produced by auricular movement in case of furunculosis, while in acute mastoiditis precise pressure over the tip of the mastoid, being careful not to touch or move the auricle, produces tenderness or pain. A diffuse chondritis of the auricle may result in a cauliflower ear but timely treatment with chemotheropy and wet Burow's packs will usually prevent the disfiguring result. Erysipelas is not an infrequent complication and I have found sulfadiazine to be much superior to penicillin in clearing it up. Exfoliation of the canal to the extent of denuding the bony wall may result and produce an atresia of the canal requiring a plastic repair.

In elderly people one must be on the lookout for a squamous cell carcinoma developing in an external otitis. I recently saw one that developed in a patient while under treatment for the otitis.

In closing I would like to stress first the importance of thoroughly cleansing the ear canal when treating these cases of external otitis. There is quite a sizable recess or pocket next to the tympanic membrane where the canal dips down to meet it, creating a difficult hole to clean out, but this must be done if there is to be success in treating these ears. One must irrigate them to get this pocket cleaned out. Second, the canal must be thoroughly dried out and blowing compressed air in the canal is about the best way I know of to do it. Third, I want to recommend the ointment I mentioned. The formula came from St. Clair Thompson's formulary and it has been exceedingly helpful in almost all forms of external otitis.

Capital National Bank Bldg.

ABSTRACT OF DISCUSSION

Dr. John H. Foster, Eagle Lake: Like almost everyone who has practiced in the north before coming to Texas, Dr. Robison is impressed by the great prevalence of external otitis in this climate. Just how much this is due to the incidence of fungus infection I am not prepared to say, but it undoubtedly plays an important part. The whole thing constitutes a vicious cycle and one is apt to be led into error as to which is cause and which effect. For instance, as an after effect of otomycosis, there may be a dry, scaly condition of the ear canal that favors infection. On the other hand fungus infection does not attack a canal that is properly protected by a coating of cerumen. In a dry canal infection by otomycosis is fairly easily killed, but if the canal remains unprotected by wax, it is only a question of time until there will be reinfection.

What produces a dry condition of the ear canals varies in different people. I have seen tiny infants in whom all their life the wax in the ears has been hard and has had to be removed mechanically, and when cleaned the canals were dry and scaly. These cases resemble the skin condition due to some food allergy, and may be due to that cause.

The most common error into which physicians are prone to fall in the consideration of this subject, both as to etiology and treatment, is to look upon external otitis as a disease entity, whereas it really comprises a number of different conditions. I should suggest that a classification something like the following be used:

1. Acute otitis externa.
   a. Acute mycotic infection.
   b. Acute eczema.
   c. Acute pyogenic infection, localized and diffuse.

Of course the case may be complicated by a combination of these. For instance, an acute fungus infection may, and often does, become complicated by a pyogenic infection caused by scratching. Likewise,

an acute eczema may become infected with streptococci and become erysipelas.

2. Chronic otitis externa.
   a. Chronic fungus infection.
   b. Chronic eczema.
   c. Chronic pyogenic infection.
   d. Chronic ulcerative condition that ranges from syphilis to cancer.

The treatment of these various conditions must be adapted to the individual case. This is very easy to say, but I am ashamed to have to confess that after forty years in practice I am still unable to be dogmatic about it.

The acute mycotic infections will usually yield to any of a number of fungicides, provided the ears are cleansed gently, but thoroughly and regularly. Some physicians simply fill the canals with powder, depending on dryness to retard fungus growth. Cresatin, bismuth violet, gentian violet, and other drugs are efficacious. When there is swelling of the canal, however, it is essential that a wick be kept in the canal to prevent the accumulation of secretion deep in the canal. This applies equally in all inflammations of the external ear accompanied by swelling.

Acute eczema of the ear has given me more trouble than any other form of external otitis. It may spread all over the auricle and adjoining skin and seem to resist any local treatment. Lassar's paste seems to help most of these cases, but I have felt that roentgen therapy has given the best results. Of course, any allergic basis of the trouble should be sought, but I have seldom been able to find the offending food or whatever cause.

I believe that in acute pyogenic infections of the canals usually treatment with wicks saturated with Burow's solution, mercurochrome, bismuth violet, or whatever you like is best until the infection localizes, if it will. I once was prone to incise these infections early, but I have abandoned that practice. In the diffuse type of infection I have found sulfanilamide of invaluable service. Formerly I felt that erysipelas about the ear was a very serious condition, but the use of sulfanilamide has removed that dread. I suppose that penicillin would be effective, but have never had occasion to use it.

The chronic cases really come within the domain of dermatology. Failures are due more to the lack of continued care than anything else. I have seen patients who had had no cerumen in the canals for years and who were subject to recurrent infections return to normal where the patient would use an ichthyol ointment regularly. However, patients will not, as a rule, use anything except when the ears are itching or painful.

The chronic scaly cases are benefited by roentgen therapy and I commend it.

UNRRA ISSUES SECOND ANNIVERSARY REPORT

United Nations Relief and Rehabilitation began operation in August, 1944. The agency has recently issued a report of activities during its two-year lifetime. Among the figures released are those having to do with shipments to countries being assisted by UNRRA, with a small tonnage going to displaced persons operations and other purposes. Through May, the cumulative shipments totaled 11,110,689 tons, of which 101,492 tons were medical supplies. Food came to 5,148,190 tons; industrial rehabilitations supplies to 2,547,288 tons; agricultural rehabilitation supplies to 769,512 tons; clothing, textiles, and footwear to 362,797 tons; and supplies furnished by combined military authorities, 1,181,410 tons.

MALARIA CONTROL IN CHINA

FRED K. LAURENTZ, M. D.
HOUSTON, TEXAS

This paper is to give, briefly, an experience in the control of a disease of great military importance in a large area under circumstances which were peculiar to that theater alone.

China is a large, thickly populated country, the vast majority of whose people are farmers. The terrain is mostly mountainous with fertile valleys between, and a few large rivers. Natural drainage is, as a rule, excellent except for man made obstructions. The people are mostly poor and ignorant but are industrious when working on their own farms. The Chinese coolie labor hired by the Army was of exceedingly poor quality.

Water hazards which promoted the breeding of mosquitoes were many, resulting from the habit of impounding all water possible for domestic purposes. The Chinese seemed to hate to see water escaping down a ditch, and would invariably build a dam across the ditch. There is a rainy season of about three months during the summer. The rainfall is rather heavy at times, and much water is impounded. The largest single water hazard was the rice paddy, and as each paddy was a separate little pond and there were many of them, the control problems were multiplied. An ordinary rice paddy was about half as large as a city lot, and they extended for miles up and down the valleys and sometimes even up the sides of the mountains by means of very beautiful terracing.

Drainage ditches were practically nonexistent. The Chinese could dig pretty looking ditches, but they were the same depth across the flats and up the hills so that water would not run in them.

Another hazard was the cemetery. China, being an old and thickly populated country, has many of them. It used to seem that almost every spot not cultivated in some way was a cemetery. The Chinese practice of burial was to lay the coffin in a slight trench and then erect a large mound of dirt over it, the dirt being dug from the surrounding area. This resulted in many small holes in each cemetery, without the possibility of any drainage.

There was no semblance of any type of sanitation and, as might be expected, the disease rate was high. A Chinese doctor told me that the life expectancy of the Chinese people was about 25 years. American troops began moving into this country in numbers in 1942. As no combat troops, except air force, were brought in, there were only air

Read before the Section on Public Health, State Medical Association of Texas, Annual Session, Galveston, May 7, 1946.

force and service troops in the theater, the service troops being used only to supply the air force, which was doing all the fighting. As a result of this rather peculiar set-up, there were personnel all over China, concentrated around airfields, and there were many airfields.

Transportation was a huge problem. Every single item used by the Army had to be flown in from India, and then redistributed to the various bases, mostly by air. Gasoline was an extremely critical item. As many other supplies were more urgently needed, malaria control material carried usually a No. 3 priority, and was at times rather scarce.

All of these conditions would seem to forecast a huge control problem. However, there were several things that reduced this problem so that the hazard was not so great. Splenic surveys done at the first, indicated that malaria was only mildly endemic in most of the American areas. An altitude of about 6,000 feet with a cool climate minimized mosquito breeding, and the common mosquito found was A. Hyrcanus, which was a poor vector. A. Minimus was found in small quantities at a few of the eastern and northern bases, and most of the malaria occurred in these areas. Malaria discipline, as taught by the Army, ranged from excellent to poor, and most of the small outbreaks that occurred could be traced to poor discipline.

The control problem was eventually worked down to essentially three things: (1) distribution of supplies, mostly pyrethrum aerosol bombs and mosquito repellent; (2) semi-permanent filling and draining projects around the bases, and (3) spraying of breeding places and occasionally a native village. For this work, covering an area nearly as large as the United States, there were one malariologist and two control units, consisting of twenty-two men and three officers, all well-trained in malaria control. These men were spread out, one or two men to a base, to supervise, the actual work being done by coolie labor, the entire program being mapped out by one of the officers and inspected at intervals. Spraying of barracks was done by the occupants with the mosquito bombs, which were one of the best disease prevention inventions of the war. Because of lack of transportation, it was impossible to get a good oil for larvaciding, and either old crank case oil or Chinese tung oil, which resembles kerosene, had to be used. Tung oil was very effective, but too volatile, necessitating frequent spraying. DDT was not available until the very last, after an epidemic at one of the northern bases. This base with 7,000 men had been having 12 to 15 cases per month and suddenly jumped to 200 cases in one month. As a result, it was possible to get a supply of DDT. Two airplanes equipped with homemade sprayers then sprayed the whole valley. This, with a marked improvement in malaria discipline, resulted in stopping the epidemic.

The final outcome of all of these measures was a very low malaria rate, in fact the lowest rate in any of the tropical theaters. Expressed in per cent, the rate was never higher than .5 per cent per month.

Health Department.

MISCELLANEOUS

COMING MEETINGS AND CLINICS

State Medical Association of Texas, Dallas, May 5-8, 1947. Dr. C. C. Cody, Jr., Houston, President; Dr. Holman Taylor, 1404 W. El Paso St., Fort Worth 3, Secretary.

American Medical Association, House of Delegates, Chicago, December 9-11, 1946; Regular General Session, Atlantic City, N. J., June 9-13, 1947. Dr. Harrison H. Shoulders, Nashville, Tenn., President; Dr. George F. Lull, 535 North Dearborn St., Chicago 10, Secretary.

Southern Medical Association, Miami, Fla., November 4-7, 1946. Dr. M. Y. Dabney, Birmingham, Ala., President; C. P. Loranz, Empire Building, Birmingham, Ala., Secretary-Manager.

Southwest Allergy Forum, Shreveport, La., March 31-April 1, 1947. Dr. W. H. Browning, Shreveport, La., President; Dr. Sim Hulsey, Medical Arts Bldg., Fort Worth, Secretary.

Texas Association of Medical Anesthetists, Dallas, May, 1947. Dr. Claudia Potter, Temple, President; Dr. Russell Bonham, Box 6237, Houston, Secretary.

Texas Association of Obstetricians and Gynecologists, Galveston, November 2, 1946. Dr. Allen McMurrey, Houston, President; Dr. Julius McIver, 714 Medical Arts Building, Dallas, Secretary.

Texas Chapter, American College of Chest Physicians. Dr. R. G. McCorkle, San Antonio, President; Dr. Elliott Mendenhall, 1217 Medical Arts Bldg., Dallas, Secretary.

Texas Club of Internists. Dr. Robert M. Barton, Dallas, President; Dr. Julian C. Barton, 414 Navarro St., San Antonio, Secretary.

Texas Hospital Association, Houston, March 27-29, 1947. Tol Terrell, Harris Memorial Methodist Hospital, Fort Worth, President; Mrs. Ruth Barnhart, 720 College Ave., Dallas, Secretary.

Texas Neuropsychiatric Association, Dallas, May, 1947. Dr. Fred T. Rogers, Dallas, President; Dr. David Wade, 604 Capital National Bank Bldg., Austin, Secretary.

Texas Ophthalmological and Otolaryngological Society, Dallas, December 6-7, 1946. Dr. C. H. Brooks, Waco, Acting President; Dr. E. D. Dumas, 425 Medical Arts Bldg., San Antonio, Secretary.

Texas Orthopedic Society. Dr. E. A. Cayo, San Antonio, President; Dr. Edward Smith, 1215 Walker Ave., Houston, Secretary.

Texas Pediatric Society, Fort Worth, October 4-5, 1946. Dr. Max Woodward, Sherman, President; Dr. John E. Ashby, 3610 Fairmount, Dallas, Secretary.

Texas Public Health Association, Dallas. Dr. L. P. Walter, Austin, President; Mr. Earle W. Sudderth, Dallas County Health Department, Court House, Dallas, Secretary.

Texas Radiological Society, January, 1947. Dr. Herman Klapproth, Sherman, President; Dr. R. P. O'Bannon, 650 Fifth Ave., Fort Worth, Secretary.

Texas Railway and Traumatic Surgical Association. Dr. F. L. Snyder, Fort Worth, President; Dr. Ross Trigg, First National Bank Bldg., Fort Worth, Secretary.

Texas Society for Mental Hygiene. Dr. Jack R. Ewalt, University of Texas Medical Branch, Galveston, President; Mrs. Elizabeth F. Gardner, 1617 Watchhill Road, Austin 21, Executive Secretary.

Texas Society of Gastro-Enterologists and Proctologists, Dallas, May, 1947. Dr. Tom E. Smith, Dallas, President; Dr. D. L. Curb, 704 Dallas Ave., Houston, Secretary.

Texas Society of Pathologists, Houston, January, 1947. Dr. May Owen, Fort Worth, President; Dr. C. T. Ashworth, Southwestern Medical College, Dallas, Secretary.

Texas State Heart Association, Dallas, May, 1947. Dr. Robert M. Barton, Dallas, President; Dr. M. B. Whitten, Medical Arts Bldg., Dallas, Secretary.

Texas State Urological Society, Houston, December 2, 1946. Dr. Joe C. Alexander, Dallas, President; Dr. Michael K. O'Heeron, 901 Medical Arts Bldg., Houston, Secretary.

Texas Surgical Society, Houston, October 7-8, 1946. Dr. G. V. Brindley, Temple, President; Dr. Walter Stuck, 1426 Nix Professional Building, San Antonio, Secretary.

Texas Tuberculosis Association. Dr. J. B. White, Amarillo, President; Miss Pansy Nichols, 700 Brazos, Austin, Executive Secretary.

Third Panhandle, District Medical Society, Lubbock, October 8-9, 1946. Dr. W. A. Carroll, Claude, President; Dr. George Powers, Fisk Bldg., Amarillo, Secretary.

MEDICAL OFFICERS RETURNING TO TEXAS*

(Corrections: Howard P. Gilbert, formerly of Houston, has returned to Denver; Raymond P. Hughes, formerly of El Paso, has joined the U. S. Army and is stationed at Fort Sam Houston.)

NAME	Serv.†	Location	Release Date
Bell County			
17. Barnhart, Joe M., III	A	Temple[1]	
Bexar County			
134. Matthews, J. D. F.	A	San Antonio	
135. Rouse, James W. H.	A	San Antonio	
136. Winter, John W.	A	San Antonio	
Bowie County			
6. Frost, Jack E.	A	De Kalb	
Brazoria County			
4. Laughlin, John M.	A	West Columbia	
Brazos-Robertson Counties			
7. Hopkins, J. J.	A	Bryan[2]	May, 1946
8. Pearson, W. E.	A	Franklin[3]	
Cameron-Willacy Counties			
14. Hawkins, W. W.	A	Brownsville[4]	
15. Spence, Charles H., Jr.	A	Raymondville	
Dallas County			
201. Lumpkin, Walter L., Jr.	A	Dallas	
202. Martin, Thomas A., Jr.	A	Dallas	
203. Stanley, Edward S.	A	Dallas	
Dawson-Lynn-Terry-Gaines-Yoakum Counties			
10. Seale, F. E.	N	Tahoka	May, 1946
Eastland-Callahan Counties			
6. Campbell, Ralph E.	A	Ranger[5]	
Ellis County			
8. McCall, Walter P.	A	Ennis	
9. Wallace, Benjamin C., Jr.	A	Waxahachie	
El Paso County			
55. Floyd, Joe R.	A	El Paso	
56. Marshall, Howard, J. H.	A	El Paso	
57. Multhauf, A. William	A	El Paso	
Galveston County			
56. Heye, Randall G.	A	Galveston	
Grimes County			
4. Madison, John C.	A	Navasota	
Hardeman-Cottle-Foard-Motley Counties			
4. Gilmore, J. T.	A	Crowell[6]	July, 1946
Harris County			
256. Cronin, Thomas D.	A	Houston	Sept., 1946
257. Jackson, James E., Jr.	A	Houston	
Harris County—Continued			
258. Liles, Ralph	N	Houston	
259. Palm, William M.	A	Houston	
260. Wilkinson, Lawrence H.	A	Houston	
261. Williams, Stephen A.	A	Houston	
Henderson County			
3. Schmitt, Herbert S.	A	Malakoff	
Kleberg-Kennedy Counties			
5. Lay, James V. M.	N	Kingsville	
Liberty-Chambers Counties			
5. Fahring, Thomas L.	A	Anahuac	May, 1946
6. Jester, A. W.	N	Crosby[1]	Aug., 1946
Lubbock-Crosby Counties			
22. Clark, V. V.		Lubbock	
McLennan County			
43. Curb, Delos G.	N	Waco	Nov., 1945
44. Fielding, Lewis J.	A	Waco	
45. Nail, Benjamin M., Jr.	A	Crawford	
46. Talley, John E.	A	Waco[2]	
47. Wells, William H.	A	Waco	
Medina-Uvalde-Maverick-Val Verde-Edwards-Real-Kinney-Terrell-Zavala Counties			
8. Norman, Earle T.	A	Uvalde	
Nacogdoches County			
4. Taylor, James G., Jr.	A	Nacogdoches[3]	May, 1946
Nueces County			
35. Sloan, John J.	A	Corpus Christi	
Panola County			
1. Daniels, DuBose	A	Carthage[4]	
Potter County			
30. Wegener, Karl F. E.	A	Amarillo	May, 1946
Reeves-Ward-Winkler-Loving-Culberson-Hudspeth Counties			
6. Crumpler, Hulen P.	A	Pecos	
Rusk County			
10. Heiligman, Emmett M.	N	Overton	
11. McNabb, Joseph F.	A	Price	
San Patricio-Aransas-Refugio Counties			
10. Tunnell John W.	A	Gregory	
Shelby-San Augustine-Sabine Counties			
8. Warren, William S.	A	Center	
Smith County			
15. Bailes, Porter M., Jr.	A	Tyler	
Taylor-Jones Counties			
21. Selmon, Tony	N	Shamford	July, 1946
Tom Green-Coke-Crockett-Concho-Irion-Sterling-Sutton-Schleicher Counties			
21. Sessums, John V.	A	San Angelo	
Travis County			
52. Moore, Roscoe O.	A	Austin	
53. Pollard, Claude, Jr.	A	Austin	
54. Watt, Terrence N.	A	Austin	
Victoria-Calhoun-Goliad Counties			
6. Melcher, Truman O.	A	Port Lavaca	May, 1946
7. Ogden, U. B.	A	Victoria	
Wharton-Jackson-Matagorda-Fort Bend Counties			
16. Hollomon, J. J.	A	Edna	
Williamson County			
6. Lehmberg, S. W.	A	Taylor[5]	Sept., 1946

*EDITOR'S NOTE: This list is the twelfth of a series in which it is hoped to name all those physicians who have been in the Armed Forces during the war recently passed and have now returned to Texas to resume civilian practice. The information in this list has been assembled from a variety of sources. While an attempt has been made to secure as complete and as accurate data as possible, we are aware that omissions and errors have been made. Not only for publication in the JOURNAL but also for the permanent records in the central office of the State Medical Association, we invite and urge correction of and addition to the material here submitted. Note that physicians from each county area are numbered consecutively following those listed in the September JOURNAL; the last number in each section therefore indicates the total physicians returned to that county area. The complete total for Texas named to date (September 20), including the accompanying list, is 1,705.

†A=Army; N=Navy; U=U. S. Public Health Service.

[1]Formerly of Beeville.
[2]Formerly of Baytown.
[3]Formerly of Dallas.
[4]Formerly of Waco.
[5]Formerly of Fort Worth.
[6]Formerly of McKinney.

[1]Formerly of Houston.
[2]Formerly of Hamilton.
[3]Formerly of Dallas.
[4]Formerly of Waskom.
[5]Formerly of Georgetown.

Fourth District Medical Society, Brady, November, 1946. Dr. H. L. Locker, Brownwood, President; Dr. Glenn H. Ricks, Brady, Secretary.

Seventh, Austin, District Society. Dr. Robert B. Morrison, Austin, President; Dr. M. I. Brown, Capital National Bank Bldg., Austin, Secretary.

Eighth, Ninth and Tenth Districts Medical Society, Orange, April, 1947. Dr. Walter F. Hasskarl, Brenham, President; Dr. George W. Waldron, Medical Arts Bldg., Houston, Secretary.

Eleventh District Society, Palestine, October 31, 1946. Dr. L. L. Travis, Jacksonville, President; Dr. C. B. Young, 929 S. Confederate, Tyler, Secretary.

Twelfth, Central Texas District Society, Temple, January 14, 1947. Dr. Thomas G. Glass, Marlin, President; Dr. H. F. Connally, Jr., Amicable Bldg., Waco, Secretary.

Thirteenth, Northwest District Society, Graham, October 24, 1946. Dr. A. L. Roberts, Fort Worth, President; Dr. Joe R. Wise, 1212 W. Lancaster, Fort Worth, Secretary.

Fourteenth District Society, Dallas, December 10, 1946. Dr. C. B. Thayer, Gainesville, President; Dr. V. L. Tuck, Sherman, Secretary.

Fifteenth, Northeast Texas, District Society, Marshall, October 8, 1946. Dr. Frank Littlejohn, Marshall, President; Dr. Henry H. Neihuss, Greggton, Secretary.

CLINICS

Dallas Southern Clinical Conference, Dallas, March 17-20, 1947. Miss Thelma J. Webb, 1133 Medical Arts Bldg., Dallas 1, Executive Secretary

New Orleans Graduate Medical Assembly, New Orleans, February 24-27, 1947. Dr. Max M. Green, Room 105, 1430 Tulane Ave., New Orleans 13, Secretary.

Oklahoma City Clinical Society, Oklahoma City, October 28-31, 1946. Executive Secretary, 512 Medical Arts Bldg., Oklahoma City.

Post Graduate Medical Assembly of South Texas, Houston, December 3-5, 1946. Secretary, 229 Medical Arts Building, Houston.

MINUTES OF EXECUTIVE COUNCIL of STATE MEDICAL ASSOCIATION

The Executive Council of the State Medical Association of Texas was called to order at 9:30 a. m., Sunday, September 29, 1946, in Centennial Room 2 of the Hotel Texas, Fort Worth, by President Dr. C. C. Cody.

Roll call revealed the following persons present:

Executive Council—*Officers:* Drs. C. C. Cody, Houston, President; B. E. Pickett, Carrizo Springs, President-Elect; C. P. Yeager, Corpus Christi, Vice-President; Holman Taylor, Fort Worth, Secretary; *Board of Trustees:* Drs. T. C. Terrell, Fort Worth, chairman; E. A. Rowley, Amarillo, E. W. Bertner, Houston; *Board of Councilors:* Drs. Ralph H. Homan, El Paso, District 1; Harvey H. Latson, Amarillo, District 3; O. N. Mayo, Brownwood, District 4; C. E. Scull, San Antonio, District 5; W. E. Whigham, McAllen, District 6; R. T. Wilson, Austin, District 7; F. J. L. Blasingame, Wharton, District 8; Ghent Graves, Houston, District 9; J. M. Travis, Jacksonville, District 11; G. V. Brindley, Temple, District 12; R. G. Baker, Fort Worth, District 13; C. C. Nash, Dallas, District 14; *Legislative Committee:* Drs. J. H. Burleson, San Antonio, chairman; L. H. Reeves, Fort Worth; J. Allen Kyle, Houston; Z. T. Scott, Austin.

Visitors by invitation—*Public Relations Committee:* Drs. Merton M. Minter, San Antonio, chairman; R. A. Miller, San Antonio; Allen T. Stewart, Lubbock; George Schenewerk, Dallas; J. E. Hogan, Big Spring; R. B. Anderson, Fort Worth, secretary (ex officio); *Council on Medical Economics:* Drs. H. E. Griffin, Graham, chairman; Tom B. Bond, Fort Worth; *Woman's Auxiliary:* Mrs. George Turner, El Paso, President; Mrs. A. B. Pumphrey, Fort Worth, Legislative Chairman; *others:* Mr. Jeff Reese, Fort Worth, legislative counsel; Mr. Philip E. Fox, Dallas, public relations counsel; Mr. Michael B. Crowson, assistant public relations counsel; Judge Ralph Yarbrough, Austin, special legal counsel; Mr. J. Louis Neff, Houston, executive director, Texas Division, American Cancer Society; Mr. Philip Overton, Austin, Texas Hospital Association, legal counsel; Dr. Helen T. Konjias, Austin, director of Texas child health survey program of American Academy of Pediatrics; Dr. George W. Cox, Austin, state health officer; Dr. J. B. Copeland, San Antonio; Dr. Stuart A. Wallace, Houston, Baylor University College of Medicine; Dr. L. B. Jackson, San Antonio, chairman, Council on Medical Economics; Dr. H. F. Connally, Waco; Dr. and Mrs. S. E. Thompson, Kerrville.

President Cody reported that Dr. N. D. Buie, Marlin, member of the Legislative Committee, had wired his regret at being unable to attend because of a recent illness from which he was convalescing.

Minutes of the previous meeting were not read, since business transacted at that meeting had already been considered by the House of Delegates of the Association and the minutes themselves had been printed in the JOURNAL (April, 1946, pp. 670-674).

Upon the request of President Cody, Dr. Griffin, chairman of the Council on Medical Economics, presented the report of that Council. Dr. Griffin said that the Council is constantly trying to protect the physicians of the state, and also the people of the state, and that the objectives of the Council are the same as in recent years. He pointed out that it is not the present policy of the Council to endorse any specific company or insurance plan designed to provide group hospital and medical service, despite resolutions adopted at the last meeting of the Executive Council and ratified by the House of Delegates at Galveston. The primary reason for failure to endorse specific plans is the belief of the Council that the present schedule of fees allowed by insurance plans is so low that until the volume of participants is large, doctors cannot be paid satisfactory fees, and that unless fees are placed at a reasonably high level while times are good, it will be impossible to raise them to cover the situation when bad times arrive. Efforts to persuade insurance companies and so-called nonprofit groups to raise fees to a satisfactory level have been unsuccessful. In recent weeks, Dr. Griffin continued, a canvas has been made of county medical societies to discover what fees are charged in general practice in the various areas of the state. The average charges reported will probably serve as a guide in the future. The canvas was made primarily because of the problem of returning veterans, who must be cared for. If it is possible to establish average fees for medical service to veterans which will be acceptable to physicians and to the Veterans Administration, such a scale of fees will prove very helpful. Dr. Griffin expressed the hope that in the near future there will be for the guidance of the Council, an agency in the central office of the Association to study and evaluate nonprofit and all insurance plans for prepaid medical service. He read three additional points which the Council on Medical Economics has added to its standards for medical service plans, making a total of nine points. The new standards follow:

6. In group insurance, the indemnity shall be payable for the service regardless of whether rendered in the patient's home, doctor's office, or hospital.

7. In group insurance, the schedule of surgical indemnities shall assure the policy holder the same proportionate protection for the various services rendered.

8. In group insurance, the optimum indemnity percentage of the average fee for service rendered may be regarded as 80 per cent of the usual charge.

Dr. Terrell wanted to know why 20 per cent should be allowed off fees.

Dr. Griffin replied that the question had been argued often, but that it was traditional to give discounts to patients unable to pay full, regular fees, although physicians should receive 100 per cent payment just as "union members" do.

Dr. Cody added that a discount was not actually proposed; that insurance companies would merely indemnify the patient for approximately 80 per cent of the average medical fee, but that the indemnity would not set the fee.

Dr. Terrell declared that fees would seek a level based on the lower indemnity figure.

Dr. Cody agreed that if the indemnity were the same as the fee, the general level of fees for a community would be the same, regardless of whether the patient were under a group plan or not, but that the Council is attempting to separate the fee and the indemnity.

Dr. Terrell inquired whether the patient would pay the additional 20 per cent.

Dr. Cody said that the insurance company indemnifies the patient for 80 per cent of the average fee, but that the relationship between patient and doctor remains personal, and that the patient would have to make up any difference necessary to cover the fee.

Dr. Anderson was requested by President Cody to discuss the hospital and medical service survey which is being made. Dr. Anderson pointed out that when passage of the Hill-Burton Hospital Construction Bill by Congress seemed assured, decision was made by the State Medical Association to make its own survey of hospital and medical service needs in preparation for carrying out the provisions of the bill. About February, 1946, county medical societies were requested to appoint committees for this purpose, and blank forms were sent out requesting data from these committees. To date, 73 societies have re-

sponded, with 51 making no reports. Committees, however, have been appointed in 68 county societies leaving 56 without committees. Dr. Anderson reminded that the State Health Department, the official agency in Texas, as designated by the Governor, has employed a director to make an official survey of the state, and that the State Medical Association is represented on the advisory council for that survey; but that the State Medical Association will have no recourse but to accept the Health Department survey and recommendations unless it makes its own survey through county medical societies, and that the county organizations will have to respond to make the State Medical Association survey a success. He read a list of the county societies which have failed to respond to the request for information, and urged that Councilors attempt to secure replies from the societies that had not responded. He displayed two charts showing how the results of the questionnaires have been tabulated to make the information readily accessible, and pointed out that such information will be invaluable to the Council on Medical Education and Hospitals, Council on Medical Economics, and other councils and committees working in the general field of hospital and medical service.

Dr. Cody urged the necessity of furnishing the central office and statewide councils and committees with facts and the necessary ammunition to fight the battles of the medical profession, and appealed for prompt replies to requests for data. Dr. Taylor reemphasized Dr. Cody's plea.

Dr. Brindley suggested that since some of the Councilors were not present, and others might have had difficulty in recording the names of delinquent counties in their districts, a letter from the central office indicating the societies from which data should be secured be sent to each Councilor, with a request for his assistance in the problem.

Dr. Griffin moved the approval of the report of the Council on Medical Economics. Following second by Dr. Travis, the motion passed.

President Cody called for a report from the Legislative Committee. Dr. Burleson declared that the objective of the Legislative Committee for the year is to secure passage by the Legislature of a Basic Science bill and a revised Medical Practice Act bill. The Legislative Committee believes that the results of the recent election make accomplishment of this objective a definite possibility, but that a fight will be necessary and success cannot be attained with dissension in the ranks of the Association. The committee believes that it has received a mandate from the House of Delegates to secure passage of the two bills mentioned, and that the committee is not attempting to originate legislation. Dr. Burleson indicated that while the Legislative Committee has looked with favor on and will give assistance to passage of legislation proposed by the Texas Tuberculosis Association and of the Coroner's bill, primary attention will be focussed on the two bills which the State Medical Association itself plans to introduce. He said that these bills, first written several years ago, have been revised somewhat, and he introduced Judge Ralph Yarbrough, Austin, who was employed to assist in their revision, to explain the present drafts.

Judge Yarbrough recalled that the Basic Science bill and the new Medical Practice Act bill, had been published in the March, 1943, JOURNAL. He said that the Legislative Committee had considered the bills at its June, 1946, meeting, and that some additional revision had been made since then upon the advice of various persons to whom copies of the bill had been submitted. The Legislative and Public Relations Committees considered the bills again September 28.

The main changes in the Basic Science bill, Judge Yarbrough described as having to do with strengthened enforcement. He said that the membership of the Basic Science Board of Examiners had been tightened, reciprocity limited, grievance appeals made possible outside of Travis County, and enforcement measures noticeably strengthened. He pointed out that the penalty for bribery and other fraud in connection with securing a Basic Science certificate had been changed from the misdemeanor to the felony level because similar fraud in other public fields in the state were on the felony level.

Dr. Scott wanted to know whether a board of six members would be legal or whether an uneven number would not be necessary.

Judge Yarbrough said that the number of members has been left at six as in the originally drawn bill, and that if the Legislature passes the bill the six-man board will be legal, for it violates no provision of the Constitution. There will be no need to make the number uneven unless the State Medical Association is opposed to even membered boards.

The proposed Medical Practice Act bill was then considered by Judge Yarbrough, who explained that it is anticipated passage of this bill will not be pressed until the Basic Science bill has been passed because the changes in the Medical Practice Act are dependent for their effectiveness on the Basic Science bill. The new bill does not provide for licensing of osteopaths or chiropractors, who will presumably be licensed by their own boards after certification by the Basic Science Board. The bill likewise eliminates from the licensing examination the subjects which under the Basic Science bill are given in the basic science examination, and repeals the annual registration fee. Most revisions in the bill are designed to strengthen and tighten it.

Dr. Brindley inquired whether interns and residents are excepted under the bill. Judge Yarbrough said that there are no changes from the present act with regard to interns and residents.

Dr. Wilson wanted to know the number of members who will be on the board of examiners. Judge Yarbrough replied that there will be six.

Dr. Burleson moved that both the Basic Science bill and the Medical Practice Act bill be approved as submitted. Dr. Reeves seconded the motion.

Dr. Terrell offered as an amendment that on page 2, section 3, lines 55, 56, and 59, of the Medical Practice Act bill, the word "diagnose" or "diagnosis" be inserted in addition to the word "treat" or "treatment." Dr. Nash seconded the amendment.

Dr. Minter expressed the view that inclusion of the word "diagnose" will not stop a laboratory from giving reports on tests, whether or not a physician directs the laboratory.

Dr. Terrell insisted that he was not asking for elimination but for a trial.

Dr. Nash pointed out that cults will make attacks on the bill and will hunt for every loophole, and that inclusion of the word "diagnose" will be helpful in combatting the cults.

The amendment was unanimously approved.

Dr. Taylor asked for clarification as to whether approval of the amendment meant that inclusion of the word "diagnose" was mandatory on the Legislative Committee or merely advice.

Dr. Cody replied that unless there are objections, he will rule that it is a mandate. The Council voiced no objection.

Dr. Brindley suggested that the Medical Practice Act bill should be definite with regard to interns and residents, and should list them along with nurses, on page 5, section 12, line 61, as being excluded from provisions of the bill.

Dr. Rowley declared that whether a physician is an intern or a resident or not, he still practices medicine.

Dr. Brindley pointed out that many interns or residents from out of the state come to Texas for only one or two years, and might be handicapped if they were forced to secure Texas licenses.

Dr. Taylor said his son had had to be licensed in Michigan to serve a residency there.

Dr. Bertner feared that if interns and residents are excluded from the bill, there will soon be no control over who employs interns and residents, and the result will be trouble.

Dr. Rowley agreed that it will be dangerous to leave the field wide open. He said Dr. Connally, a member of the present Board of Medical Examiners, believes that most hospitals request licensing of their interns and residents.

Dr. Taylor wanted to know whether the courts have not ruled that an intern or resident in a hospital who accepts patients is not actually practicing medicine and subject to licensing.

Dr. Connally replied that there may not have been a court ruling in the matter, but that general practice is in accordance with Dr. Taylor's understanding. The hospital is responsible for its interns and residents, but most hospitals will not accept such responsibility unless the intern or resident has a license. Licensing is a protection to the hospital as well as to the public.

Judge Yarbrough said that the 1943 Medical Practice Act bill, now under consideration, with a few revisions, does not change existing law regarding interns and residents. In the past the medical profession has largely controlled its interns and residents and little court action has been taken. In court a decision would depend on what the intern was doing in an individual case.

Dr. Bertner believed the situation already taken care of, as medical schools urge their graduates to obtain licenses promptly.

Dr. Brindley argued that some graduates cannot take an examination for a license until three or four months after their graduation, which prevents them from beginning an internship until that time if a license were required.

Dr. Bertner pointed out that as the new bill makes no change in the status of interns and residents, the present practice of the hospitals can be continued.

Dr. Graves reported that Massachusetts issues a restricted license for interns.

Dr. Brindley moved that interns who are graduates of class A medical schools be permitted to serve a twelve month internship in a hospital without a license, provided the hospital assumes responsibility for the intern's acts, this provision to be inserted on page 5, line 61 of the Medical Practice Acts bill.

Dr. Bertner declared that the kind of hospital eligible to take interns will have to be named.

The motion died without a second.

Dr. Brindley then moved that the attorney and the Legislative Committee study the Medical Practice Act bill with regard to the rights of interns and residents, and act on its studies. Dr. Travis seconded the motion.

Dr. Burleson voiced opposition to the motion because it places the responsibility on the Legislative Committee to make a decision which he considered the Executive Council should determine.

Dr. Jackson suggested that since the State Medical Association provides for an intern membership, at $4 per year, $1 of which goes toward medical defense, the Association assumes that interns are licensed.

Dr. Brindley declared that the attorney had already said he does not know the rights of interns and that the motion was intended to force additional study where information is not complete.

Dr. Moore expressed the opinion that the simplest thing to do would be to license all interns and residents even though an occasional inconvenience to a hospital or an intern or resident would occur.

The motion failed to pass.

Approval of the Basic Science bill and Medical Practice Act bill, with the amendment adding the word "diagnose" to the definition of the practice of medicine, was unanimous.

Dr. Burleson moved that the Council endorse the legislation of the Tuberculosis Association and the Coroner's bill. Dr. Reeves seconded the motion, which passed unanimously.

President Cody called on Dr. Pickett to report for a subcommittee of the Legislative Committee, appointed September 28 to consider the Taft-Smith-Ball National Health bill. The subcommittee was composed of Dr. Pickett, chairman, and Drs. Scott and Taylor. Dr. Pickett indicated that the report was being made at the request of the Washington and Chiago offices of the American Medical Association Bureau of Legal Medicine and Legislation, which wishes to have the opinion of physicians throughout the nation on the bill. The report declared that the subcommittee considered the bill the most satisfactory and workable bill from the standpoint of the medical profession and the public to originate in Washington, and exception was taken only to the provision for a National Health Council as advisors to the Surgeon General of the U. S. Public Health Service, it being the opinion of the committee that a majority of all members of such advisory committees should be graduates in medicine. Dr. Pickett moved adoption of the report. Dr. Scott seconded the motion and it was unanimously passed.

President Cody recognized the presence of Mrs. George Turner, El Paso, President of the Woman's Auxiliary; Mrs. A. B. Pumphrey, Fort Worth, chairman of the Legislative Committee for the Auxiliary; and Mrs. S. E. Thompson, Kerrville, past president of the Auxiliary; and expressed regret that Mrs. J. B. Foster, Houston, chairman of the Auxiliary's Public Relations Committee, was unable to be present. Mrs. Turner and Mrs. Pumphrey expressed their appreciation of the invitation to attend the Executive Council meeting, and expressed great interest in the activities of the Association.

Dr. Bertner, upon the request of President Cody for direction in prosecuting the passage of the Basic Science and Medical Practice Act bills, moved that the bills be reprinted, with the revisions which had been made, and distributed to Councilors, county medical societies, and others, to facilitate passage of the bills. The motion was seconded by Dr. Yeager.

President Cody suggested that members of the Legislature should be interviewed personally at frequent intervals between now and January 1, to maintain their interest in passage of the bills. He insisted that it would not be wise to assume as true, rumors that a member of the Legislature is fighting the State Medical Association or is for it; that the facts must be obtained first hand.

Dr. Bertner's motion passed unanimously.

President Cody called on Dr. Minter for a report of the Public Relations Committee. Dr. Minter said that a letter on the shortage of nurses had been circulated recently by the committee, and replies from various physicians had indicated the necessity for three modes of attack: (1) certification of more schools of nursing in Texas, particularly in smaller hospitals; (2) cessation of exploitation of student nurses by hospitals, coupled with institution of salaries for student nurses; (3) increased encouragement by physicians of girls to go into the nursing profession.

Dr. Minter called the attention of the council to recent suits regarding rebates on eyeglasses, a practice which has been condoned for many years but which is considered unethical. He read a resolution proposed by the Public Relations Committee condemning the practice of accepting rebates on prescriptions and appliances as in violation of the Principles of Medical Ethics, and requesting that boards

of censors of county medical societies see that such practices are stopped and suitable disciplinary action taken where necessary.

Dr. Minter then moved that, upon recommendation of the Public Relations Committee, a committee be appointed from the Public Relations Committee to serve as a liaison with the Texas Hospital Association and Nurses Association, to study, investigate, and act on the nursing shortage problem. Drs. Reeves and Travis seconded the motion, which was unanimously approved.

Dr. Minter moved adoption of the resolution regarding rebates, and Dr. Mayo seconded the motion.

Dr. Burleson urged that the Public Relations Committee have a committee similar to the one for the nursing problem, to consider the problem of rebates. for in his opinion the Public Relations Committee is not fully aware of the situation. He said the resolution was out of line, uncalled for, and would stigmatize a great number of reputable physicians; that the discount or rebate system mentioned had been in operation for all the forty years of his practice, and stopping it would not make glasses cost less.

Dr. Taylor rose to a point of order, and read from Section 1, Article 5 of the Constitution, in which provision is made for referral of matters of medical ethics to the Board of Councilors.

Dr. Minter said that Dr. Burleson had made two points: (1) he had been concerned with the problem for forty years and had been able to do nothing about it, and (2) a number of physicians would be stigmatized. He pointed out that the medical profession could not go to business firms and tell them what to charge, and attack the problem from that angle. He read from an editorial in the August 3, 1946, *Journal of the American Medical Association* specifically calling attention to the practice of rebates as contrary to the Principles of Medical Ethics, and declared that if a practice is being carried on by the physicians of Texas which is regarded as unethical by the American Medical Association and the State Medical Association, it might be well to start house cleaning at home.

President Cody said that Chapter 3, Article 1, Section 5, of the Principles of Medical Ethics provides that matters of the sort be called to the attention of the Board of Councilors. His decision was to refer the problem of rebates and the resolution thereon to the Board of Councilors for consideration.

Dr. Minter called on Dr. Hogan to present the matter of adjudication boards.

Dr. Hogan reported that Harris County Medical Society several years ago set up an adjudication board to hear complaints and assist in working out suitable fees in industrial practice. The board has recently been directed to hear general complaints by patients, thus serving as a sort of public relations board. The Public Relations Committee considered that a similar plan might be instituted to advantage in other county medical societies.

President Cody asked for a motion that county medical societies be invited to set up adjudication committees to discourage exploitation and chiseling by physicians, and to explain to patients that in many instances they receive more for their money than they realize.

Dr. Graves moved that the Executive Council recommend the setting up of adjudication committees by each county medical society. Dr. Minter seconded the motion, which passed unanimously.

Dr. Minter requested Dr. Schenewerk to report on county medical society preceptorships. Dr. Schenewerk outlined a proposed course of six lectures on medical history and ethics, legal medicine, building up a practice, relationship to Veterans Administration, and so forth, which the Public Relations Committee considered valuable for prospective county medical society members, especially transfers from other states and young physicians. He pointed out that the Los Angeles County Medical Association and other societies, had found the plan of requiring prospective members to attend lectures and pass an examination on similar courses of great value in orienting the new members. He moved that the Executive Council approve the voluntary organization of councils on medical preceptorships in the larger county medical societies, and in such smaller societies as wish them. Dr. Reeves seconded the motion.

Dr. Graves wanted to know whether the course would be compulsory prior to acceptance for membership if the county medical society so rules.

President Cody said it will be left to the county medical society to decide whether the course will be compulsory, voluntary, or not used at all.

Dr. Nash feared that requirements for membership are already somewhat involved, and that a six-lecture course will add so much rigmarole prospective members will be discouraged.

Dr. Taylor rose to a point of order. In addition to the difficulty involved in getting smaller societies to act on the matter, he wished to point out that the Judicial Council of the American Medical Association is leery about allowing county medical societies to inhibit membership. The matter, however, according to Chapter 11 of the By-Laws, is strictly up to the Board of Councilors to decide.

Dr. Graves recommended that the motion be amended to make the course voluntary for prospective members rather than compulsory.

President Cody believed that the current enormous number of transfers from other states would make wise a formal orientation course to give unity to the membership.

Dr. Schenewerk declared that the plan was proposed to help new members rather than to impose a hardship on them.

President Cody added that another reason for such a course would be the opportunity given for older members, particularly in large societies where there are many new members coming in, to know more about applicants.

Dr. Taylor raised again the question of legality of making such a course compulsory and a predicate for membership.

President Cody reminded that Dr. Graves' amendment would make the course voluntary.

Dr. Nash wanted to know of what value the course would be if it were voluntary, since very few would probably take advantage of the lectures. The Boards of Censors should consider applicants and know whether they are worthy of membership.

The vote was 10 for and 8 against approval of voluntary preceptorship courses, and the motion was declared adopted.

Dr. Minter introduced Dr. Stewart, who reported on the status of coöperative hospitals. He reviewed the growth of coöperative hospitals in Texas following passage of a bill in the Legislature making such hospitals possible, and pointed to some of the advantages and disadvantages of the method of providing hospital care. In conclusion, he recommended (1) conferences with rural farm groups indicating the willingness of the Association to coöperate in improving rural health; (2) approval of community hospitals which are maintained according to standards of medical ethics; (3) insistence that community hospitals are on dangerous ground because in some instances they may in effect be a corporation practicing medicine, which is illegal; (4) direction of the attention of rural communities to the availability of prepayment plans for hospital and medical service at lower cost than coöperative hospital plans offer. He moved acceptance of the report, and the motion was seconded by Dr. Terrell. It was unanimously adopted.

Dr. Minter concluded the various Public Relations Committee reports by saying that his committee had

met with the Legislative Committee September 28, and will continue to work closely with that committee.

Dr. Taylor was requested by President Cody to introduce the matter of a pediatric survey now being conducted in Texas. Dr. Taylor recalled that the survey, under the auspices of the American Academy of Pediatrics, had been considered by the House of Delegates in Galveston and that, upon the recommendation of the reference committee to which the problem had been referred, the House of Delegates had left the matter open pending action by the Texas Pediatric Society (TEXAS STATE JOURNAL OF MEDICINE, June, 1946, pp. 122, 130). He quoted from a letter by Dr. John E. Ashby, Dallas, secretary of the Texas Pediatric Society, certifying that the Pediatric Society has approved the survey, and from another letter by Dr. Thomas J. McElhenney, Austin, and Dr. Bruce A. Knickerbocker, Dallas, state chairmen of the child health survey, requesting the Executive Council of the State Medical Association to approve the survey. He then presented Dr. Helen T. Konjias, Austin, who is directing the survey in Texas.

Dr. Konjias read excerpts of an editorial from the May, 1946, *Journal of the American Medical Association*, which gave wholehearted approval to the American Academy of Pediatrics child health survey and urged coöperation of physicians throughout the country in the survey.

Dr. Taylor moved that the Executive Council approve the study of child health services being made at the present time by the Texas Pediatric Society in coöperation with the American Academy of Pediatrics, pursuant to action of the House of Delegates at Galveston pertaining to the matter, the Texas Pediatric Society having approved the study. Dr. Travis seconded the motion, which carried unanimously.

Dr. Konjias said that the American Academy of Pediatrics had left up to the state medical societies decision as to whether osteopaths should be included in the child health survey, particularly since osteopaths, in some states, at least, allegedly have a large percentage of the care of infants and children. She requested that the Executive Council instruct her as to whether the osteopaths should be included in the Texas survey.

President Cody opened the question for a motion to include the osteopaths, but none was made.

President Cody asked Dr. Taylor to introduce the matter of mental health and hygiene. Dr. Taylor reported that the American Medical Association had requested the State Medical Association to concern itself with mental health and hygiene and that the Texas Society for Mental Hygiene and the Texas Neuropsychiatric Association had approved the idea. He moved that the matter be referred to the Committee on Mental Health of the State Medical Association, with a view to coöperating with the mental health program. Dr. Brindley seconded the motion, which carried unanimously.

Dr. Nash moved that the Council recess at 1 p. m. for lunch to reconvene at 2 p. m. The motion passed.

Before recessing, President Cody formally presented Dr. Latson as the new Councilor for District 3.

The Executive Council reconvened following lunch, and Dr. Brindley, chairman of a subcommittee of the Board of Councilors, was called on by President Cody to report regarding possible changes in Councilor districts. Dr. Brindley stated that the majority of districts do not want to be changed, though most of them would be willing to be enlarged. He urged that the Council either agree that no changes be made in the districts or that additional studies be made before action is taken. He then outlined the possible changes in districting which the subcommittee had considered.

Dr. Rowley insisted that the Third District is happy as it is now constituted, and while it would be pleased to annex societies, it does not want to lose any. Dr. Stewart agreed that the Lubbock area would like to stay with Amarillo.

Dr. Travis indicated that the Eleventh District would be delighted to have Rusk County moved back into that district.

Dr. Reeves assured the Council that the Thirteenth District is satisfied, but he believed the good of the Association as a whole should be considered. He moved that the subcommittee continue its investigation of the redistricting problem and report through the Board of Councilors to the House of Delegates at the next annual session if its studies were complete by that time. Dr. Burleson seconded the motion, which carried unanimously.

Dr. Anderson suggested that the subcommittee also consider combining some of the smaller county societies within Councilor districts in order to make stronger county organizations.

President Cody gave his view that the Board of Councilors holds the Association together and that strong Councilor districts are essential to a strong Association. He noted that under a new rule Councilors are to be nominated by districts, and if the districts fail to nominate there is no method specified whereby to secure new Councilors.

Dr. Bertner was requested by President Cody to discuss cancer activities in the state. Dr. Bertner, in turn, introduced Mr. J. Louis Neff, executive director of the Texas Division, American Cancer Society. Mr. Neff reminded that the House of Delegates in Galveston had endorsed the program of the American Cancer Society, that the American Cancer Society carried on all of its medical activities under the direct supervision and approval of organized medicine; and that the sole objective of the Cancer Society is to secure early diagnosis and adequate treatment of cancer. To carry out its objective, it is necessary for the patient to report promptly to his family physician any symptoms which might indicate cancer, and for the physician to obtain suitable examination and diagnosis. He said that in other states pamphlets aimed toward helping achieve those ends have been distributed over the signature of the State Medical Association but at the expense of the American Cancer Society. He requested approval by the Executive Council of such a plan for Texas, and specific approval of the several pamphlets of a medical nature, which he displayed.

Dr. Bertner said he would vouch for the acceptability of the pamphlets, and moved that Mr. Neff's request be approved. Upon second by Dr. Whigham, the motion carried unanimously.

President Cody announced the invitation of the American Medical Association to the State Medical Association, to participate in the one hundredth anniversary celebration of the national organization next year. He assumed that the State Medical Association would gladly take part in the celebration.

President Cody brought up the question of whether Association committees which had once been useful but have now become inactive, should be continued from year to year, naming particularly the committee dealing with fractures, malaria, pneumonia, and liaison with the Lone Star State Medical, Dental, and Pharmaceutical Association.

Dr. Travis moved the discontinuance of such committees until such time as they might again appear to be necessary. Dr. Burleson seconded the motion, which passed unanimously.

President Cody called for any new business.

Dr. Stuart Wallace, Baylor University College of Medicine, Houston, expressed his thanks for the opportunity to attend the meeting.

Dr. Wilson moved that the Council adjourn, Dr. Brindley seconded the motion, it carried, and adjournment was had at 2:50 p. m.

PEDIATRIC CONFERENCE PROGRAM ANNOUNCED

The tentative program for the University of Texas Pediatric Conference, to be held October 28-November 2 in Galveston with the coöperation of the Division of Maternal and Child Health of the State Health Department, has been released by Dr. Arild E. Hansen, chairman of the University Department of Pediatrics. Application to attend the conference, the first of this year's special postgraduate courses to be offered by the University of Texas School of Medicine, should be sent to Dr. Hansen.

Guest speakers for the conference include the following:

Dr. Myron Wegman, Louisiana State University School of Medicine, New Orleans.

Dr. Wilburt C. Davison, Duke University School of Medicine, Durham, N. C.

Dr. Franklin Henry Top, Wayne University College of Medicine and Herman Kiefer Hospital for Contagious Diseases, Detroit.

Dr. Douglas N. Buchanan, University of Chicago School of Medicine, Chicago.

Dr. Julian D. Boyd, State University of Iowa College of Medicine, Iowa City.

Dr. Daniel C. Darrow, Yale University School of Medicine, New Haven, Conn.

Dr. Edward L. Pratt, Yale University School of Medicine, New Haven, Conn.

Dr. James Flett, Jr., Yale University School of Medicine, New Haven, Conn.

Dr. Russell K. Smith, University of Texas School of Dentistry, Houston.

Members of the University of Texas Medical Branch staff who will participate include Drs. Hansen, J. K. Lamar, Alice Gamble, Boyd Reading, J. L. Treadway, Jr., Robert A. Gardner, Nuel C. Windrow, Jr., Francis A. Garbade, William C. Levin, Paul Brindley, Erle E. Wilkinson, Randolph L. Schaffer, Morris Pollard, Groom S. Shepard, G. W. N. Eggers, J. H. Waterman, A. O. Singleton, Robert E. Leaton, Harry H. Womack, and MacDonald Fulton, Ph. D., and Hilda Walker, R. N.

The tentative schedule for the conference, sessions of which will be at Randall Hall on the University campus unless otherwise noted, follows:

October 28

(8:30) Registration.
(9:00-12:00) Problem of Diarrhea in Infants—Dr. Hansen, chairman.
(9:05) General Scope of Problem—Dr. Wegman.
(9:35) Specific Treatment of Dehydration—Dr. Darrow.
(10:15) Bacteriological Aspects of Infantile Diarrhea.—Dr. Fulton.
(10:30) Treatment of the Bacteriologic Phase of Diarrhea—Dr. Gamble.
(10:45) Intermission.
(11:00) Presentation of Cases—Dr. Treadway.
Technical Considerations in Treatment—Dr. Flett.
(2:00-3:45) Endocrine Disorders in Children—Dr. Reading, chairman.
(2:00) Orientation of Endocrine Field—Dr. Hansen.
(3:00) Hormone Assays As a Means of Diagnosis—Dr. Lamar.
(3:20) Biochemical Determinations to Aid in Diagnosis—Dr. Pratt.
(3:45) Intermission.
(4:00) Significance of Physical Measurements in Pediatric Diagnoses—Dr. Boyd.
(8:00) William Buchanan Lecture: Development in Treatment of Diarrhea—Dr. Barrow (Room 102, Laboratory Building).

October 29

(9:00-12:00) Dr. Garbade, chairman.
(9:00) Treatment of Diabetes Mellitus.
(10:00) Symposium: Splenomegaly As a Diagnostic Problem.
Presentation of Cases—Dr. Schaffer.
Pediatrician's Viewpoint—Dr. Wegman.
Hematologist's Viewpoint—Dr. Levin.
Pathologist's Viewpoint—Dr. Brindley.
(2:00-5:00) Dr. Hansen, chairman.
(2:00) General Pediatric Clinic.
Presentation of Cases—Dr. Gardner.
Discussion of Cases—Drs. Boyd, Wegman, Darrow.
(3:30) Intermission.
(3:40) Present Status of Control of Dental Caries—Dr. Boyd.
(4:20) Dental Problems in Children—Dr. Smith.
(6:30) Dinner (Buccaneer Hotel).

October 30

(9:00-12:00) Round Table: Acute Contagious Diseases of Childhood—Dr. Garbade, chairman.
(9:00) Newer Aspects of Erythematous Diseases, Stressing Differential Diagnosis and Treatment—Dr. Top.
(10:00) Present Status of Immunization Procedures—Drs. Wilkinson, Reading.
(10:45) Intermission.
(11:00) Meningitis: Diagnosis and Treatment—Dr. Top.
(1:00) Buffet Lunch—Dr. Gardner, chairman (Stewart Convalescent Home).
(2:30) Convalescent Care of Orthopedic Patients—Dr. Eggers.
(3:00) Convalescent Care of Rheumatic Fever Patients. Presentation of Cases—Dr. Gamble.
Discussion of Management—Dr. Hansen.

October 31

(9:00-12:00) Neurological Problems in Childhood—Dr. Wilkinson, chairman.
(9:00) Major and Minor Convulsive Disorders—Dr. Buchanan.
(9:45) Psychiatric Problems in Relation to Convulsive Disorders—Dr. Waterman.
(10:15) Intermission.
(10:30) Presentation of Cases—Dr. Leaton.
(11:00) Specific Problems in Differential Diagnosis of Neurological Disorders in Children—Dr. Buchanan.
(2:00-4:00) Symposium: Encephalitis—Dr. Darrow, chairman.
(2:00) Differential Diagnosis from Pediatrician's Viewpoint—Dr. Davison.
(2:30) Differential Diagnosis from Neurologist's Viewpoint—Dr. Buchanan.
(3:00) Differential Diagnosis from Virologist's Viewpoint—Dr. Pollard.
(3:30) Intermission.
(3:40) Presentation of Cases—Dr. Womack.
(4:00) Latest Methods of Treatment—Dr. Top.
(6:00) Tea (Hotel Galvez).
(7:00) Banquet, Wives Invited (Hotel Galvez).

November 1

(9:00-12:00) Round Table: Abdominal Pain in Children—Dr. Wilkinson, chairman.
Pediatrician—Dr. Davison.
Surgeon—Dr. Singleton.
Pathologist—Dr. Brindley.
Psychiatrist—Dr. Waterman.
Presentation of Cases—Dr. Windrow.
(2:00) Kidney Diseases in Children—Dr. Davison.
Presentation of Cases—Dr. Shepard.
(3:30) Intermission.
(3:45) Speaker to be announced.
(8:00) College of Nursing Commencement Exercises (Stephen F. Austin School Auditorium).

November 2

(9:00-12:00) Joint Session with Nursing Staff—Dr. Hansen, chairman.
(9:00) Prematurity As a Cause of Infant Mortality—Dr. Hansen.
(9:20) Nursing Procedures in the Care of the Premature Infant—Miss Walker.
(10:20) Problem of Home Care of Premature Infants—Dr. Reading.
(10:40) Intermission.
(10:50) Accepted Methods of Infant Feeding—Dr. Garbade.
(11:20) Problems in Infant Feeding.
(11:50) Closing Remarks—Dr. Hansen.

HOSPITALS NEEDING INTERNS AND RESIDENTS

Methodist Hospital, Dallas. Capacity 206 beds. C. B. Fielder, Superintendent (interns desired, July, 1947).

El Paso City County Hospital, El Paso. Capacity 192 beds. George W. Cook, Col., U. S. A., Ret., Superintendent (3 interns for one year term, graduates of class A medical school only).

Nix Memorial Hospital, San Antonio. Capacity 145; admissions 4,988. Miss A. Pearl Smith, Administrator (intern or resident now; application for intern or resident July 1, 1947).

TUBERCULOSIS ASSOCIATION OFFICERS

When the Texas Tuberculosis Association met in Houston on September 16-17, officers were elected for the year as follows: president, F. K. Dougharty, Liberty; first vice-president, Mrs. Joella Terrill

Butler, Wichita Falls; second vice-president, Dr. David McCullough, Kerrville; secretary, J. W. Butler, Texas City; treasurer, Dr. Z. T. Scott, Austin; executive committee, Drs. R. G. McCorkle, San Antonio; J. Edward Johnson, Austin; Elliott Mendenhall, Dallas; James E. Dailey, Houston; Sim Hulsey, Fort Worth; and the president, secretary, and treasurer. The next meeting will be held next year at a time and place to be designated.

The Texas Chapter of the American Trudeau Society, meeting in conjunction with the Tuberculosis Association, elected Drs. E. G. Faber, Tyler, president; James E. Dailey, Houston, vice-president; Elliott Mendenhall, Dallas, president-elect; and Thomas R. Jones, Houston, secretary.

Miss Emmeline J. Renis, Houston, was elected president of the Texas Conference of Tuberculosis Secretaries; Mrs. Gertrude Gardiner, El Paso, vice-president; Mrs. P. R. Watts, Port Arthur, secretary-treasurer; and Miss Renis; Mrs. Gardiner; Mrs. Watts; George H. Craze, San Antonio; Mrs. George Cooksey, Waco; and Miss Sula Fleeman, Fort Worth, executive committee.

STATE UROLOGICAL SOCIETY TO MEET

The Texas State Urological Society, organized on the last day of the Annual Session in Galveston last May, will hold its first annual meeting in Houston at the Jefferson Davis Hospital on December 2, the officers of the society announce. All urologists and other physicians interested in urology are invited to be present. Those who wish to attend should communicate with the secretary of the society at their earliest opportunity.

Officers for 1946 are Dr. Joe C. Alexander, Dallas, president, and Dr. Michael K. O'Heeron, Houston, secretary. Dr. B. Weems Turner, Houston, will be host for the December meeting.

TEXAS ASSOCIATION OF OBSTETRICIANS AND GYNECOLOGISTS

The Texas Association of Obstetricians and Gynecologists will meet November 2 at the Buccaneer Hotel, Galveston, with Dr. Herbert E. Chamberlain, Sacramento, Calif., and Dr. John Rock, Brookline, Mass., as guest speakers. Officers of the society, Dr. Allen McMurrey, Houston, president; Dr. J. E. Kanatser, Wichita Falls, vice-president; and Dr. Julius McIver, Dallas, secretary-treasurer; invite all members of the State Medical Association to attend the annual obstetrical and gynecological program.

Dr. Rock is clinical professor of gynecology at Harvard University, research fellow in obstetrics at Boston Lying-in Hospital, and visiting obstetrician at the Massachusetts General Hospital, Boston Lying-in Hospital, and the Free Hospital for Women. Dr. Chamberlain is a former associate professor of psychiatry at the University of Chicago; one-time director of the Minneapolis Child Guidance Clinic; chief of Child Welfare Services; and U. S. delegate to the sixth and seventh Pan-American Congresses on Child Welfare. He has recently returned from three months in Manila where he was assigned at the request of the State Department upon solicitation of the Philippine government, to outline a federal program for child health and welfare.

A cocktail hour and dinner, to which physicians wives are also invited, will be part of the program.

PROFESSIONS MAY AID PEACE

The medical, dental, and legal professions of any country are only a small segment of its population, but because of their daily contacts, they can exercise a tremendous force toward understanding. Because of this, they become an important force in developing international understanding and contributing toward world peace. We must become better acquainted with one another. We must exchange ideas and technics. We must have sympathy and appreciation for each other's work and problems, and we must make an individual effort to express all this. This is not a one-man job. It is the responsibility of every individual professional man. Toward this end, international conferences and meetings should be encouraged and arranged.—Daniel F. Lynch, D. D. S., F. A. C. D., M. Ann. District of Columbia, Aug., 1946.

HEALTH EDUCATION IN SCHOOL

I regard health education and the program in the schools as so very important because medical service and the health of the people are so dependent upon what goes on in the schools. While we have made great progress in public health, the extension and improvement of medical service requires education to teach people to do things for themselves. A doctor may give his patient good advice, and yet all too often the patient fails to act intelligently in carrying out that advice. . . .

To prevent the serious results of disease through periodic medical supervision or early treatment requires much education, and the doctors cannot do it all. So the future of preventive medicine for the individual must have very much more health education,—education for proper attitudes regarding health and disease prevention, education for good judgment as to when to call the doctor, and for health habits in order to benefit from our modern knowledge of how to improve health and to prevent disease.—Harold H. Mitchell, M. D., Connecticut State M. J., Sept., 1946.

EXPECTANT FATHERS INSTRUCTED

The New Haven, Conn., Department of Health has completed ten years of operation of its Fathers' Councils, a series of meetings for the instruction of expectant fathers in the safeguarding of the health of mother and infant, the *Connecticut State Medical Journal* (Sept., 1946) points out. Approximately 1,100 men have attended one or more meetings, and between 150 and 200 fathers have attended every session of a given course. During the war years the course has been streamlined and cut from six to three sessions, and the number of lecturers from ten to five.

This successful venture has resulted also in a series of parents' meetings in the past two years, following immediately upon the conclusion of each course. Beginning as a single meeting for expectant fathers and mothers jointly for discussion of problems concerning the young child, the session is now held traditionally during May, Child Health Month, and consisted of four meetings this year.

INTERNATIONAL HEMATOLOGY AND RH CONFERENCE

An International Hematology and Rh Conference will be held in Dallas on November 15 in affiliation with the Second Mexican Blood Transfusion Congress, which meets in Mexico City, November 17-25, Dr. Sol Haberman, secretary of the conference, has announced. Any physician or investigator in blood research interested in attending the conference is invited. There is no registration fee, but those planning to be present should register in advance so that housing accommodations may be arranged.

The hematology and Rh conference is being sponsored by Baylor University Hospital, Dallas, and speakers will include Drs. Ludwig Hirszfeld, University of Wroclaw, Wroclaw, Poland; Ignacio Gonzalez Guzman and Eduardo Uribe Guerola, University of Mexico College of Medicine, Mexico City; R. R. Race, Lister Institute of Preventive Medicine, London; Philip Levine, Ortho Research Foundation,

Linden, N. J.; William Dameshek, Tufts College Medical School, Boston; Ernest Witebsky, University of Buffalo School of Medicine, Buffalo, N. Y.; I. Davidsohn, University of Illinois College of Medicine and Mount Sinai Hospital, Chicago; Louis K. Diamond, Harvard Medical School, Boston; and J. M. Hill, Southwestern Medical College and Baylor University Hospital, Dallas.

The morning session of the conference will be held at the Adolphus Hotel with Dr. Hill, chairman of the conference, presiding. The afternoon session will be held in the Medical Library of Baylor University Hospital with Dr. Guerola, president of the Second Mexican Blood Transfusion Congress, presiding.

Reservations for rooms may be made with Dr. Haberman, William Buchanan Blood, Plasma, and Serum Center, Baylor University Hospital, Dallas, before November 5.

CELLOPHANE USED AS WOUND COVERING

A report by N. L. Chistyakov on the use of cellophane in the treatment of wounds appears in the August, 1946, issue of the *American Review of Soviet Medicine*. (See also *Khirurgiya*, No. 7, 1944, pp. 32-37.) The conclusions reached are as follows:

"For the past two years we have used cellophane gauze dressing in treating superficial and deep gunshot wounds in their later stages, as well as open and closed postoperative wounds. We have observed no delay in healing nor any complications which could be attributed solely to the cellophane gauze dressings.

"With the use of this method we were able to perform subsequent dressings with practically no pain or discomfort to the patient.

"At evacuation points a wound can be examined and observed under the cellophane after the overlying gauze dressing has been removed.

"Cellophane used around nerves heals into the wound in most instances.

"Being cheap and economical, cellophane deserves wider use in the treatment of wounds and should be made available at all drug depots."

LIBRARY NOTES

PACKAGE SERVICE

The package library consists of collections of reprints and other periodical material on various subjects, prepared for lending to members of the Association. Requests for packages should be addressed "Library, State Medical Association of Texas, 1404 W. El Paso Street, Fort Worth, Texas." Twenty-five cents in stamps should be enclosed with the request to cover postage and part of the expense of collecting the material. Only one package may be borrowed at a time, and packages are allowed to remain in the hands of the borrower for 14 days.

Packages were mailed from the Library of the State Medical Association during September, to the following:

Dr. Merton M. Minter, San Antonio—*National Health Program* (3 articles).

Dr. J. E. Hogan, Big Spring—*National Health Program* (3 articles).

Dr. F. J. L. Blasingame, Wharton—*National Health Program* (3 articles).

Dr. Elliott Mendenhall, Dallas—*National Health Program* (3 articles).

Dr. Harry A. Tubbs, Fredericksburg—*Intestines, diverticula* (11 articles).

Dr. A. O. McCary, Freeport—*Paralysis, spastic* (5 articles).

Dr. Maurice E. Barrett, Decatur—*Adolescence* (18 articles).

Dr. J. J. Stephen, Robstown—*Ovulation* (1 article).

Dr. W. R. Fickessen, Kerrville—(1 journal).

Capt. J. P. Gibson, Whipple, Ariz.—*Tobacco* (8 articles).

Dr. D. K. Robinson, Rocksprings—*Atomic Energy* (6 articles).

Dr. Masters H. Moore, Tyler—*Liver, function tests* (20 articles).

Dr. L. W. Spikes, Ralls—(1 journal).

Dr. George M. Tulloch, Okmulgee, Okla.—*Am. J. Ophth.* (35 articles); *Arch. Ophth.* (25 articles).

Dr. Carlos A. Slaughter, Sanatorium—*Empyema, tuberculosis* (16 articles).

Dr. T. A. Taylor, Lufkin—*Oxygen, therapy* (16 articles).

Joanna Wells, Jr., Denton—*Medicine, socialized* (12 articles).

Dr. J. T. Boyd, Marlin—*Intestines, diverticula* (17 articles).

Dr. Robert H. McCarty, Lubbock—*Drugs* (11 articles).

Mr. Pete Moore, Henrietta—*Hospital plans* (1 book).

Dr. R. W. Burford, Dallas—*Brain, tumors* (5 articles).

Dr. J. M. Travis, Jacksonville—*Religion and Medicine* (5 articles).

Dr. W. R. Swanson, Taylor—*Blood, groups* (6 articles).

Dr. Holloway Bush, McKinney—*Migraine, therapy* (3 articles); *Skin, tuberculosis* (2 articles).

Dr. T. C. Cole, Huntsville—*Ureters, calculi* (22 articles).

Dr. H. Klapproth, Sherman—*Thyroid, cancer* (10 articles).

Dr. Robert A. Johnston, Houston—(1 article).

Dr. Allen T. Stewart, Lubbock—(1 article).

Dr. Frank Lancaster, Houston—(1 article).

Dr. T. J. McElhenney, Austin—(1 article).

Dr. Milton Davison, Marlin—(1 article).

Dr. L. B. Holland, Wichita Falls—(1 journal).

Dr. S. C. Arnett, Lubbock—*Intussusception* (8 articles).

Dr. P. T. Kilman, Malakoff—*Impregnation* (11 articles); *Diabetes, Insipidus* (4 articles).

Dr. G. E. Glover, Austwell—*Penicillin* (4 articles).

Dr. N. A. Elder, Nixon—*Abscess, subphrenic* (17 articles).

Dr. B. L. Jenkins, Clarendon—*Arthritis, Rheumatoid, therapy* (4 articles).

Dr. P. S. Joseph, Alice—*Anesthesia, metycaine* (24 articles).

Dr. George M. Waddill, Jr., Amarillo—(1 journal).

Dr. Carroll T. Adriance, Galveston—*Varicose Veins* (19 articles).

Dr. W. S. Rhode, Colorado City—*Undulant Fever* (21 articles).

Dr. J. L. Coleman, Sanatorium—*Bronchiectasis* (25 articles).

Dr. Ben B. Hutchinson, Lubbock—*Cornea, ulcers* (4 articles).

Dr. J. E. Hogan, Big Spring—*Curare* (14 articles).

Dr. Fred W. Standefer, Lubbock—*Anesthesia, avertin* (11 articles).

Dr. Ernestine Smith, Amarillo—(2 books).

Dr. J. D. Magee, Abilene—*Nose, polypi* (5 articles).

Dr. F. J. L. Blasingame, Wharton—(2 journals).

Dr. Charles H. Brown, Wichita Falls—*Hodgkin's Disease* (12 articles).

Scott & White Clinic, Temple—(1 journal).

Dr. P. W. Malone, Big Spring—(1 Journal).

Dr. M. Jay McSween, Slaton—*Cold, anesthesia* (10 articles).

Dr. P. L. Allen, Weatherford—*Syphilis and Anesthesia* (24 articles).

Dr. W. W. Coulter, Jr., Sanatorium—*Diabetes and Tuberculosis* (11 articles).

Dr. R. G. Granbery, Marshall—*Surgery* (4 articles).

Dr. Tate Miller, Dallas—*Tropical Medicine* (6 articles).
Dr. Earl R. Cockerell, Abilene—(5 journals).
Evelyn Cutts, San Antonio—*Medicine, socialized* (4 articles).
Marlys Mayfield, San Antonio—*Medicine, socialized* (4 articles).
Gwen Yoachum, San Antonio—*Medicine, socialized* (4 articles).
Billy Gilchrist, San Antonio—*Medicine, socialized* (4 articles).
Anita V. O'Krent, San Antonio—*Medicine, socialized* (4 articles).
Dr. C. B. Batson, Lubbock—*Undulant Fever* (14 articles).
Providence Hospital, Waco—(1 book).
Southwestern Medical College, Dallas—(3 journals).
Dr. Ross Owens, San Antonio—*Condyloma* (7 articles).
Violet Fischer, Houston—*Medicine, socialized* (4 articles).
Dr. Ernest E. Miller, Beeville—(1 journal).
Dr. Edgar Smith, Dallas—(1 book).
Scott & White Clinic, Temple—(3 journals).
Dr. Charles Mims, Mission—*Chancroid* (14 articles).
Dr. J. E. Armstrong, Paris—*Medicine, preventive* (12 articles).
Dr. J. T. Krueger, Lubbock—*Gastro-Intestinal Tract, tumors* (10 articles).

ACCESSIONS

Philadelphia, Blakiston Company—Fleming: Penicillin, Its Practical Application.
Philadelphia, W. B. Saunders Company—Wilder: A Primer for Diabetic Patients, edition 8; Russell, West and Manwell: Practical Malariology.
Springfield, Charles C. Thomas—Braun-Menendez: Renal Hypertension; Liethauser: Early Ambulation and Related Procedures in Surgical Management.
Chicago, A. N. Marquis—Who's Who in America.
Washington, U. S. Government Printing Office—Congressional Directory, 79th Congress, 2nd Session.

SUMMARY

REPRINTS RECEIVED, 1,466.	LOCAL USERS, 45.
JOURNALS RECEIVED, 206.	BORROWERS BY MAIL, 73.
ITEMS CONSULTED, 283.	PACKAGES MAILED, 78.
ITEMS TAKEN OUT, 151.	ITEMS MAILED, 615.

TOTAL ITEMS CONSULTED AND MAILED, 1,047.

MOTION PICTURE FILM LIBRARY

Motion picture films on medical subjects, 16 mm., both silent and sound, some in color, and suitable for either medical or lay audiences, are available for loan to county medical societies, hospital staffs, or individual physicians, on request. Borrowers will be required to pay only the cost of shipment of the films, by express, with insurance, and for any damage to films while in the hands of the borrower.

Requests for films should be addressed to "Motion Picture Film Library, State Medical Association of Texas, 1404 West El Paso Street, Fort Worth 3, Texas." A list of available films, with descriptions, will be furnished on request.

The following motion picture films were loaned by the Motion Picture Film Library of the State Medical Association during September:

Accent on Use (Available through the courtesy of the National Foundation for Infantile Paralysis)—West Texas Hospital, Staff meeting, Lubbock.

Immunization (Available through the courtesy of the Lederle Laboratories, Inc.)—Premedical group, Lamar College, Beaumont.

Malaria—Rotary Club, Arp.

Poliomyelitis, Sister Kenny Method of Treatment of (Available through the courtesy of Dr. Herbert Hipps, Waco)—West Texas Hospital, Staff meeting, Lubbock.

NEWS

Contributions to this department will be appreciated. News should be of general medical interest, such as public health activities, new hospitals, personal items of more than local value, etc. News for a particular number of the JOURNAL should be in the hands of the Editor not later than the fifteenth of the preceding month.

Falfurrias Health Clinic.—Fifty-nine children were examined in a preschool clinic sponsored by the health committee of the Brooks County Home Demonstration Council and held in the Falfurrias elementary school building August 30, reports the Falfurrias *Facts*. Local physicians, nurses, and health workers coöperated in the clinic. Enlarged or infected tonsils were the most prevalent ailment found. The first injection for diphtheria immunization was given to thirty-nine children. Drs. C. H. Otken, Glenn Bartlett, and Paul Toma assisted in the examinations.

Merger of Dallas City and County Health Departments has been approved by Dr. Horace E. Duncan, county health director, as well as the Dallas County Medical Society, City Medical Advisory Board, the Council of Social Agencies, and County Judge Al Templeton, according to the Dallas *Times-Herald*. City Manager V. R. Smitham has indicated that several conferences will be held during the next few months regarding suitable legislation to make the proposed consolidation possible. Any such legislation would provide for a special health department tax, it was pointed out. Dr. Duncan said that he believed those chosen to work in such a consolidated department as is planned should be given assurance of security of employment and placed under civil service. He added that although there would be a single centralized head, it probably would be necessary to maintain specialized personnel for service in the city and in rural communities.

Galveston Health Unit Proposed.—City officials of Galveston are planning for creation of a city health unit with a view to integrating all of the city's health and sanitation activities, reports the Galveston *News*. Establishment of such a unit has previously been advocated by special planning committees and civic groups, but for the first time city officials are formulating specific plans for one. If a proposed budget for the fiscal year is adopted, Dr. John McGivney, acting city health officer, says that a full-time sanitarian will be employed, to serve also as assistant director of the unit. A part-time city health physician and director of the unit will be employed until additional funds become available for a full-time director.

San Angelo-Tom Green County Health Board reorganized recently with four new members, informs the San Angelo *Standard*. Dr. K. B. Round, the only holdover member, was named chairman to succeed Dr. Victor E. Schulze, retiring member who had held the chairmanship since inception of the board. Dr. Round and Dr. F. Leon Hutchins, the newly elected vice-chairman, represent Tom Green County physicians. The board ruled that outdoor serving of food might be permitted provided such service is after sundown only, tables or counters are of concrete or other easily cleaned surface, and food is stored and prepared in a screened building. The procedure for local teachers to follow in securing health certificates was modified so that a physical examination and blood test will be made each year, but evidence of a negative tuberculin skin test or negative roentgen examination will be necessary only once every two years, instead of every year as previously required. The board also passed a ruling directing retail beer establishments to provide toilet facilities for customers.

San Jacinto Memorial Hospital, a 100 bed unit to care for the needs of the Baytown-Goose Creek-

Pelly area, will be erected as soon as conditions permit, as the result of a $1,250,000 gift from the Humble Oil and Refining Company, reports *Medical Record and Annals*. The three story, air conditioned hospital, with provision for a fourth story when needed, will be a memorial to those who served in World War II.

A Highland Park Hospital cannot be erected at the site proposed by Dr. Frank Austin, according to a ruling of the local board of adjustment, reports the Park Cities *News*. Dr. Austin planned to build a twelve story, 300 bed hospital on property now occupied by a small medical building and a nursery salesroom, to help care for the urgent need for more hospital facilities in Dallas. Approximately 150 property owners appeared before the board to protest that speeding ambulances would endanger the lives of children and residents and that sirens would disturb their sleep. Dr. Austin was undecided whether to contest the unanimous ruling of the board that the zoning regulations would not be changed to permit erection of the hospital.

Providence Hospital, Waco, expects to conduct a campaign for funds to expand its facilities materially, according to the Waco *Sunday Tribune-Herald*. An executive committee of Waco business men to direct the campaign, which is scheduled for this fall, has already been named. One-third of the money for the proposed hospital addition will be provided by the hospital; application for one-third will be made to the federal government; and Waco citizens will be asked to furnish the remaining one-third. Provision has been made to cover expenses of conducting the campaign for funds so that the entire amount raised will be used for the hospital. The Waco appeals review board, in passing on the campaign, noted that the need for additional hospital beds is the most critical of all of Waco's present needs.

Texas Medical Center.—Houston Shriners opened a campaign September 5 to raise a minimum of $500,000 for construction of a crippled children's hospital at the Texas Medical Center, reports the Houston *Chronicle*. Plans called for a parade, barbecue, and funfest at $100 per ticket with Leo Carrillo and other motion picture celebrities on hand to aid the cause. A five-minute color motion picture made with the coöperation of Howard Hughes Production and Interstate Theatres and starring Pat O'Brien, with some scenes filmed in Houston, was to be shown in each of the thirty theaters in the metropolitan area of Houston in the interest of the campaign. The Arabia Temple of Houston began sponsoring crippled children's work in Houston twenty-eight years ago and is at present operating a clinic at Methodist Hospital. Inadequate hospital facilities in the Houston area have handicapped such work, however, and the Shriners are attempting to obviate this difficulty by making possible a suitable hospital in the new medical center.

Baylor University College of Medicine had two recent additions to the clinical faculty, the Houston *Post* states. Dr. Robert A. Hettig, assistant professor of medicine, comes from the University of Michigan Hospital where he was medical instructor for five years, and Dr. Amy Breyer, assistant professor of clinical pediatrics, was director of the cardiac program of the Connecticut Department of Public Health. Plans for coöperative work with the new Naval hospital are being considered by college officials.

University of Texas.—The inclusive-rate service charge, recently adopted by the Board of Regents of the University of Texas, became effective at John Sealy Hospital on September 1, informs the Galveston *News*. Dr. B. I. Burns, medical director, explained that the service charge represents total cost of serums, nursing care, drugs, operating room, laboratory and other diagnostic examinations, x-rays, and all special therapy treatment which may be ordered by the physician in charge, but does not include private room, ward, or private nurse charges, fever therapy treatment, blood for transfusions, outside telephone calls, personal laundry, or meals or overnight accommodations for relatives or guests. The inclusive-rate service charge totals $38.50 for the first week; $57.50 for two weeks; $68.50 for three weeks; and $1 per day after three weeks, and is based on the average charge for services made to patients during the past year.

Sixty resident physicians who were officers in the Army and Navy during the war are now being trained at the University of Texas School of Medicine, Dr. B. I. Burns, medical director of John Sealy Hospital, has announced through the Galveston *Tribune*. Accredited specialty boards and the Council on Medical Education and Hospitals of the American Medical Association have approved residencies at the University in the fields of anesthesia, dermatology and syphilology, internal medicine, neuropsychiatry, obstetrics and gynecology, ophthalmology, otolaryngology, orthopedic surgery, pathology, pediatrics, radiology, surgery, and urology, Dr. Burns points out.

The venereal disease clinic at John Sealy Hospital was closed to the general public on September 1 because of lack of funds which have previously been allotted the project by the federal government through the State Health Department, informs the Galveston *Tribune*. The duties of the clinic are now limited primarily to teaching purposes, Dr. Chester North Frazier, professor of dermatology and syphilology, states.

The course in physical therapy at the University of Texas School of Medicine has been lengthened from nine to twelve months and entrance requirements have been increased from two years of college work to three years of college and three semester hours of physics, Miss Ruby Decker, technical director of the course, reports in the Galveston *Tribune*. The change was suggested at a recent meeting of the American Physiotherapy Association and most schools are adopting similar programs.

Beauford Jester, Democratic nominee for the governorship of Texas, and Dr. C. O. Terrell, Fort Worth, member of the Board of Regents of the University of Texas, were entertained at luncheon in Galveston in August by several chairmen of departments of the School of Medicine and by Dr. Chauncey D. Leake, vice-president and dean, reports the Galveston *News*. Both Mr. Jester and Dr. Terrell were vacationing in Galveston.

Dr. W. A. Selle, professor of physiology at the University of Texas School of Medicine, delivered a paper at the first postwar meeting of the American Congress of Physical Medicine in New York, September 4-7, informs the Galveston *Tribune*.

Dr. Eric Ogden, professor of physiology at the University, has recently been elected to membership in the New York Academy of Science for his experimental discoveries on hypertension and will visit the academy this fall in connection with his work, according to the Galveston *Tribune*.

Dr. Harvey Slocum, professor of anesthesia at the University, has been requested by the American Medical Association to arrange a technical exhibit on inhalation anesthesia for demonstration at the International Medical Conference in Mexico City, October 6-12, states the Galveston *Tribune*. The exhibit was shown in part by Dr. Slocum and Dr. Kermit O'Neal at the last meeting of the American Medical Association. Dr. Slocum expected to participate in the October 16 celebration in Bos-

ton commemorating the centennial anniversary of the discovery of inhalation anesthesia by Dr. W. T. G. Morton, a dentist and Harvard medical student.

Southwestern Medical Foundation.—Purchase of twenty-four acres of land, mostly owned by the Southwestern Medical Foundation, for location of a 500 bed, $5,000,000 Veterans Administration Hospital has been approved by President Harry Truman, reports the Park Cities *News*. The site adjoins property on which a city-county hospital will be built as well as being next to the Southwestern Medical College property.

Dr. William F. Mengert, chairman of the Department of Obstetrics and Gynecology, Southwestern Medical College, has been appointed general program chairman of the Third American Congress on Obstetrics and Gynecology to be held at St. Louis in September, 1947, informs the Dallas *News*.

Personals

Dr. Charles J. Koerth, Kerrville, has been elected Regent of the American College of Chest Physicians for District 12, which comprises the entire state of Texas.

Dr. McIver Furman, Corpus Christi, has recently been elected a director of the National Tuberculosis Association, reports the Corpus Christi *Times*.

Dr. M. Dennis, general practitioner and local physician for the Santa Fe Railway in Cleburne for forty-one years, has retired, informs the Cleburne *Times Review*. His duties for the railroad have been assumed by *Dr. Tolbert Yater*.

Col. Bloyce H. Britton, El Paso, was recently named surgeon at Middleton Air Material Area Headquarters and commanding officer of the Olmsted Field Station Hospital, Pennsylvania, the El Paso *Times* announces. Colonel Britton has been in active service since 1942 and recently returned from the Pacific area.

Dr. Will Miller, acting director of the Corsicana-Navarro Health Department, has been appointed an assistant collaborating epidemiologist in the U. S. Public Health Service to collect reports in Corsicana of communicable diseases, states the Corsicana *Sun*. The new "dollar a year" appointment, Dr. Miller points out, is merely an effort on the part of the U. S. Public Health Service to secure more complete communicable disease data as similar reports previously were supposed to be sent to Austin and will continue to be cleared there. Dr. Miller urges more conscientious reporting on the part of physicians as only by that means will it be possible to concentrate epidemiologic assistance where it is most needed.

Dr. Fred Harrell, recently returned from military service, has been reappointed city health officer by the Olney city council, reports the Olney *Enterprise*. *Dr. H. C. McKinney*, who had consented to serve as the health officer when Dr. Harrell was called into service, asked to be relieved of his duties when Dr. Harrell returned.

Dr. Howard Dudgeon, Jr., retiring president of the Waco Journal Club, entertained with a stag party at Lake Waco Country Club in August to which eighteen Waco physicians and eight from out of the city were invited, according to the Waco *Sunday Tribune-Herald*. *Dr. Wilson Crosthwait* has assumed presidency of the club, in which members give reviews from current medical journals.

Dr. Minnie L. Maffett, Dallas, first president of the Texas Federation of Business and Professional Women's Clubs and past president of the national group, was honored with a tea September 8 by the Dallas Business and Professional Women's Clubs, informs the Dallas *News*. The Texas Federation has established a fellowship fund in Dr. Maffett's name, the interest from which will be awarded annually to a woman graduate of a Texas medical school for graduate work. Dr. Maffett's birthday, September 9, will be observed as a special Minnie L. Maffett fellowship day each year.

Dr. J. Wilson David, Corsicana, has resigned as a member of the board of education after serving for more than sixteen years, reports the Corsicana *Sun*. Dr. David offered his resignation because his niece will teach in the Corsicana schools this year. The resignation was accepted "with regret" by other board members, who spoke in complimentary terms of Dr. David's service to the public schools.

Dr. Charles B. Truett, Denison, received a fractured shoulder September 5 when he was forced to drive his automobile off the road to avoid hitting another car, according to the Denison *Herald*. Dr. Truett, who was reported not to be seriously injured, was returning from Dallas when the accident occurred. His car was badly damaged.

Dr. Michael K. O'Heeron, Houston, will participate in a panel discussion on urology at the Thirty-Second Clinical Congress of the American College of Surgeons in Cleveland, December 16-20, informs *Medical Record and Annals*.

Dr. and Mrs. George S. True, Big Spring, observed their fifty-eighth wedding anniversary on September 5, reports the Big Spring *News*. A son and five daughters, other relatives, and a number of friends called on Dr. and Mrs. True to extend their congratulations. The only child not present, a daughter residing in Forrest Hills, N. Y., was expected for a visit shortly after the celebration.

Dr. M. C. Hagler, New Braunfels, was struck on the back of the head by an unknown assailant while he slept the night of September 3, informs the New Braunfels *Herald*. Although his injuries were slight, Dr. Hagler awoke at midnight to find himself on the floor in a pool of blood from the wound on his head. A window screen had been cut for entrance to the locked house. Nothing appeared to be stolen.

Marriages

Dr. Wayne H. McClure, Kermit, married Miss Louise Ellett, Jennings-Ordinary, Va., on March 31.

Dr. Robert S. Alcorn, Menard, married Miss Betty Jane Bauer, Cincinnati, recently.

SOCIETY NEWS

Bell County Society

June 5, 1946

(Reported by O. B. Gober, Secretary)

Cirrhosis of the Liver: Possibilities of Treatment—David M. Flett.

Common Eye, Ear, Nose, and Throat Misconceptions—E. R. Veirs.

Bell County Medical Society met at the Kyle Hotel, Temple, on June 5 with twenty-nine members and six guests present. The scientific program indicated above was carried out and there was a discussion of means to help elect candidates favorable to medicine.

Applications for membership of Francis J. Kelly, Lloyd N. Gilliland, Jr., and Wendell Phillips Ward were unanimously approved.

August 7, 1946

(Reported by O. B. Gober, Secretary)

Thiouracil Treatment of Thyrotoxicosis—F. M. Hammond.

The Rheumatic Fever Problem in Texas—V. J. Simmon.

Bell County Medical Society met August 7 at the Kyle Hotel, Temple, with thirty-seven members and eight guests present to hear the program outlined above.

George S. Littell and Leroy M. Cochran were elected to membership upon transfer from Dallas County Medical Society.

President Andrew E. Wiedeman introduced L. M. Cochran, of the Veterans Administration Hospital, who introduced Browley S. Freeman, A. D. Hurt, Dr. Littell, and Robert A. Wise, all of the hospital.

Ector-Midland-Martin-Howard-Andrews-Glasscock Counties Society

August 15, 1946

Ector-Midland-Martin-Howard-Andrews-Glasscock Counties Medical Society met August 15 at Big Spring for a picnic and an address by B. E. Pickett, Carrizo Springs, President-Elect of the State Medical Association. Auxiliary members were also present.

Hidalgo-Starr Counties Society

September 12, 1946

What a General Practitioner Should Know about Glaucoma—Edward W. Griffey, Houston.
Treatment of Renal Colic with Special Emphasis on Crystalluria—Paul R. Stalnaker, Houston.

Hidalgo-Starr Counties Medical Society met September 12 at Edinburg. Edward W. Griffey, Jefferson Davis Hospital and Baylor University College of Medicine, Houston, and Paul R. Stalnaker, also of Baylor University, presented the papers named above.

Hunt County Society

June 18, 1946

(Reported by Harriet Rogers, Secretary)

Hunt County Medical Society met June 18 for a meeting and barbecue given by Dr. and Mrs. S. D. Whitten at their cabin on Club Lake near Greenville. Dr. Whitten presided. About fifty members and their wives heard Holman Taylor, Fort Worth, Secretary of the State Medical Association, discuss the proposed basic science bill and other matters of interest to the Association. Tate Miller, Dallas, also spoke.

July 9, 1946

(Reported by Harriet Rogers, Secretary)

Hunt County Medical Society met July 9 in the City Park, Greenville, for a basket picnic sponsored by the Auxiliary, of which Mrs. B. F. Arnold is president and Mrs. Henry W. Maier chairman of the entertainment committee. Following the meal Mrs. Stephens gave some readings. H. M. Bradford, vice-president, presided. Forty members and guests were present.

September 10, 1946

(Reported by Harriet Rogers, Secretary)

Telling Our Patients—Charles H. Roadman.
Discussion—I. F. Peak.
Effect of the Weather on Heart Diseases and Treatment, Army Decisions—H. M. Bradford.
Discussion—E. T. Crim.

Hunt County Medical Society met September 10 at the Municipal Building, Greenville, with Vice-President H. M. Bradford presiding, to hear the scientific program outlined above.

Lubbock-Crosby Counties Society

July 2, 1946

(Reported by Martin H. Benson, Secretary)

Medical Program of the Veterans Administration—O. J. LaBarge, Lubbock.
Basic Science Legislation—E. A. Rowley, Amarillo.

Lubbock-Crosby Counties Medical Society met at the Plains Clinic, Lubbock, on July 2 with twenty-one members and five guests present. President A. G. Barsh presided.

O. J. LaBarge, of the Veterans Administration, explained in detail the medical program of the Veterans Administration and answered many questions from the members concerning it. President Barsh appointed a committee composed of J. T. Hutchinson (chairman), E. L. Hunt, and Olan Key to meet with the Veterans Administration to work out a fee schedule.

E. A. Rowley, Amarillo, Councilor of the Third District, read and discussed the proposed basic science bill and the medical practice act. He urged that physicians investigate candidates for public office and vote for those who favored the program of the State Medical Association.

James W. Rollo spoke briefly on barbiturates. He had been asked by a federal agent to bring to the attention of the society that physicians are writing a great many prescriptions for barbiturates and that they should use more discrimination.

A communication from the American Cancer Society was read.

August 6, 1946

(Reported by Martin H. Benson, Secretary)

The Rh Factor—O. R. Hand, Lubbock.

Lubbock-Crosby Counties Medical Society met August 6 at the Plains Clinic, Lubbock, with twenty-one members present. Pauline Miller, vice-president, presided. O. R. Hand, Lubbock, presented a paper on the Rh factor which was discussed generally.

The fall meeting of the Third District Medical Society, to be held in Lubbock, October 8-9, was considered and committees appointed as follows: arrangements, F. B. Malone (chairman), Roy Riddle, Emerson Blake; registration, O. R. Hand (chairman), M. M. Ewing; entertainment, R. C. Douglas (chairman), Doyce Clark, Henri Mast. Upon motion by Dr. Mast, seconded by Emerson M. Blake, it was voted to asses each member $10 to defray expenses of the meeting.

E. E. McClure was elected to membership upon application.

Tarrant County Society

September 3, 1946

(Reported by W. P. Higgins, Jr., Secretary)

Plastic Operation for Forming Artificial Vagina in Congenital Absence of Uterus and Vagina; Presentation of Patient—Jack Furman.
Contact Lenses—J. W. Eschenbrenner.

Tarrant County Medical Society met September 3 in the auditorium of the Medical Arts Building, Fort Worth, with forty members and three visitors present. The program as outlined above was presented. The talk by Jack Furman was discussed by A. D. Roberts and William M. Crawford; that of J. W. Eschenbrenner by Gatlin Mitchell, A. E. Jackson, Van D. Rathgeber, and F. L. Snyder.

Jack D. Brownfield was elected to membership upon application, and William W. Wood, Jr., upon transfer from a county medical society in Minnesota.

Tributes were paid Dr. J. D. Collins, who died August 4, and Mrs. Bob Barker, mother of Dr. Bob Barker, who died August 25.

The secretary read a letter from A. L. Roberts, president of the Thirteenth District Medical Society, announcing a meeting of the society for October 24 at Graham.

Tom Green-Eight County Society

June 10, 1946

(Reported by F. T. McIntire, Acting Secretary)

Tom Green-Eight County Medical Society held a call meeting June 10 at the Shannon Hospital, San Angelo, with Grady Mitchell, president, presiding, and F. T. McIntire acting as secretary. A discussion was held regarding the local candidates for State Senator and their attitudes on medical matters.

July 15, 1946

(Reported by R. M. Finks, Secretary)

Tom Green-Eight County Medical Society held a call meeting July 15 in San Angelo with thirty-three members present. Following a report of the legislative committee, Victor E. Schulze moved that the society not publish anything in regard to the State Senatorial race. The motion carried.

The society voted upon motion by W. D. Anderson, second by R. L. Powers, that suitable resolutions be prepared in connection with the recent death of Dr. Charles E. Mays.

September 2, 1946

Tom Green-Eight County Medical Society met September 2 in San Angelo and passed a resolution

endorsing plans for establishment of a city-county hospital in San Angelo. Plans for the facility are hardly past the suggestion stage, the society noted, in expressing its desire to establish "through the city planning board, a city-county hospital in connection with a program of civic improvement, such hospital to provide facilities for low-income people and to include wings for the care of tuberculous, mental, maternity, and contagious patients, respectively, as well as general modern hospital care." Representatives of the society expect to meet with the planning board soon to discuss the proposed hospital.

The society also approved motions to hold a well-child conference, prenatal and postnatal clinics, and an annual crippled children's clinic. The clinics will be held in coöperation with the San Angelo-Tom Green County Health Unit.

Eleventh District Society

October 24, 1946

(Reported by C. B. Young, Secretary)

Early Ambulation following Major Surgical Procedures—R. H. Bell, Palestine.
Diverticulosis and Diverticulitis—J. T. Boyd, Jacksonville.
Urological Anomalies—Max Moulders, Longview.
Common Diarrheas in Infancy—Masters H. Moore, Tyler.
Treatment of Diabetes Mellitus—James A. Greene, Houston.
Cause and Prevention of Sudden Death in the Obstetrical Patient—Harrison W. Johnson, Houston.

Eleventh District Medical Society will hold its fall meeting October 24 in Palestine, with the scientific program outlined above. B. E. Pickett, Carrizo Springs, President-Elect of the State Medical Association, will be guest speaker at the luncheon for all visiting physicians and their wives.

AUXILIARY NOTES

Officers of the Woman's Auxiliary to the State Medical Association of Texas: President, Mrs. George Turner, El Paso; President-Elect, Mrs. Edward C. Ferguson, Beaumont; First Vice-President, Mrs. L. B. Windham, Tyler; Second Vice-President, Mrs. V. M. Longmire, Temple; Third Vice-President, Mrs. R. E. Clark, Memphis; Fourth Vice-President, Mrs. J. E. Hogan, Big Spring; Corresponding Secretary, Mrs. Robert F. Thompson, El Paso; Recording Secretary, Mrs. M. A. Ramsdell, San Antonio; Publicity Secretary, Mrs. J. F. Campbell, Fort Worth; Treasurer, Mrs. Guy Jones, Dallas; Parliamentarian, Mrs. Joe Nichols, Atlanta.

Suggestions for County Medical Auxiliary Presidents.—A printed pamphlet prepared by Mrs. Frank Haggard, San Antonio, chairman of the School of Instruction for the State Auxiliary, entitled "Suggestions for County Medical Auxiliary Presidents" was distributed to state officers, committee members, council women, and county presidents of the Auxiliary by Mrs. George Turner, El Paso, President, in the summer with the recommendation that it be read, studied, and passed on to succeeding officers.

Opening with the motto

"To build on the Foundations of Yesterday
With the tools of today—
The better Medical World of Tomorrow,"

the pamphlet discusses the duties and responsibilities of county presidents, program, program and public relations, legislation, *Hygeia* and physical examinations, benevolent, *Bulletin*, and membership.

"Holding a membership in the Medical Auxiliary is a great privilege, which in turn carries with it many responsibilities to both the medical profession and to our respective communities," the pamphlet declares. "One of the Auxiliary's main objectives is the promotion of health in all its phases. Members must be intelligently informed of Auxiliary aims in order to effectively participate in community, state, and national affairs. Perhaps it never was more important than it is today that our councils should be filled with wisdom, and that the execution of our plans should be more effective."

Another recent publication of the Auxiliary is a historical table showing the names and addresses of presidents, recording and corresponding secretaries, and treasurers of the Woman's Auxiliary since 1918, the year of its organization, originally compiled by the Archives Committee, Mrs. W. A. Wood, Waco, chairman, in 1937, and now brought up to date.

Mrs. W. C. Kimbrough, wife of Dr. W. C. Kimbrough, Denton, and prominent church and civic leader, died in Post, Texas, August 4, 1946, en route home from New Mexico, where she and her husband and another couple had been vacationing. She had been in ill health for several months.

BOOK NOTES

[1]**Shock Treatment and other Somatic Procedures in Psychiatry.** By Lothar B. Kalinowsky, M. D., Research Associate in Psychiatry, College of Physicians and Surgeons, Columbia University, and New York State Psychiatric Institute and Hospital, and Paul H. Hoch, M. D., Assistant Clinical Psychiatrist, New York State Psychiatric Institute and Hospital. Foreword by Nolan D. C. Lewis, M. D., Professor of Psychiatry, College of Physicians and Surgeons, Columbia University. Cloth, 294 pages. Price $4.50. New York, Grune & Stratton, 1946.

This book presents a comprehensive review of the history and development of the modern shock therapies and other somatic procedures. It includes electric shock, metrazol shock, insulin shock treatments, prefrontal lobotomy, nitrogen inhalations, and sleep treatments. In all instances the history and theoretical considerations of the various forms of somatic procedures are carefully discussed and the bibliography is excellent.

In the chapter on convulsive treatments and insulin shock therapy, the technique is carefully outlined and should be a valuable guide for the beginner in these fields. This book should not serve as a substitute for practical experience in the method before attempting treatment. It should be a valuable guide and refresher for the physician who has had instruction but who wants to check up on certain points as he institutes his own therapeutic regime. I was impressed by the fairness to all variations of opinion as to the method of application of these treatments as well as to the basis or theory behind their operation. Dr. Kalinowsky has the distinction of introducing electro-convulsive therapy to the United States and many working in the field received their first instruction at his hands.

This book is recommended without qualification to all physicians in the psychiatric field who are using, or who contemplate using, any of the somatic procedures in the treatment of psychiatric syndromes. Workers in the field will also find the theoretical discussions in the last chapter of the book quite stimulating and I think they will appreciate the scientific attitude of Dr. Kalinowsky, whose final statement is as follows: "Broadly speaking, it can only be stated that shock treatment is an unspecific form of treatment acting as a special form of sedation and stimulation on certain types of abnormal mental activity. A great deal of research is needed, however, to explain how this sedation and stimulation are accomplished. At present we can only say that we are treating empirically, disorders whose etiology is unknown, with shock treatment whose action is also shrouded in mystery."

[1]Reviewed by Jack R. Ewalt, M. D., Professor of Neuropsychiatry and Director, State Psychopatric Hospital, Galveston.

DEATHS*

Dr. Jack Bevil, Hull, Texas, died of congestive heart failure July 24, 1946, in a Beaumont hospital.

The son of Mr. and Mrs. T. B. Bevil, Dr. Bevil was born at Warren, Texas, September 3, 1889. He attended Texas Christian University, Fort Worth; Memphis School of Medicine; and was graduated from St. Louis College of Physicians and Surgeons in 1919. He practiced in Hull for twenty-seven years.

Throughout his professional career Dr. Bevil was a member of the State Medical Association and the American Medical Association, first through Polk County Medical Society and then through Liberty-Chambers Counties Medical Society. He served the Liberty-Chambers Society as president in 1934. He was a member of the Methodist Church, a Mason, and a Shriner.

Survivors include his wife, the former Miss Olive Nugent, whom he married in Houston on February 15, 1917; a son, Dr. Jack N. Bevil, resident surgeon at St. Joseph's Hospital, Houston; a daughter, Miss Dorothy Gene Bevil, Austin; his mother, Mrs. T. B. Bevil, Warren; and three sisters, Mrs. Charles Masterson, Warren, and Mrs. Carl Hickman and Mrs. Ernest Ford, both of Nacogdoches.

Dr. William Roy Cain, Tyler, Texas, was found dead in his bed early on the morning of August 11, 1946, of coronary occlusion.

Dr. Cain was born in Tyler on June 4, 1887, the son of William L. and Lou Anna (Collier) Cain. He attended the Tyler public schools and was graduated in 1909 from the University of Texas School of Medicine, Galveston. He served an internship at the Texas Pacific Hospital, Marshall, and the International and Great Northern Hospital, Palestine. In 1911 he entered general practice at Grapeland, but within about six months he moved to Tyler. He entered military service in 1916, first being sent to the Army Medical College in Washington and then going on active duty with the Medical Corps. He participated in the war in France, for which he received the Purple Heart and was cited for meritorious service by both French and United States commanders. In 1919 he retired from Army service with the rank of captain and returned to Tyler to specialize in eye, ear, nose, and throat. He was ophthalmologist with the U. S. Army Induction Station at Tyler for two and a half years and was city health officer for a number of years.

DR. W. R. CAIN

At various times during his professional career Dr. Cain was a member of the State Medical Association and American Medical Association through Smith County Medical Society. He had been a member continuously from 1942 until his death. He was a member of the Methodist Church, a Mason, and a member of the Dr. Pepper Domino Club, a social organization in which he had been active many years. His hobbies were fishing and gardening.

On March 2, 1911, Dr. Cain married Miss Ann Catherine Radey, of Palestine. Mrs. Cain; a daughter, Mrs. C. J. Montgomery, Houston; two sisters, Mrs. S. B. Newton, Weatherford, and Mrs. Glennie Harris, Washington, D. C.; two brothers, W. L. Cain, Tyler, and E. S. Cain, Glendale, Calif.; and one granddaughter, Susan Hastings Montgomery, Houston, survive.

Dr. Charles E. Collins died suddenly July 2, 1946, at his home in Waco, of coronary occlusion.

Dr. Collins was born July 11, 1888, near Lockhart, Texas, the son of C. P. and Emma (Dudgeon) Collins. His academic education was received in the public schools of Alvin and at Southwestern University, Georgetown. His medical education was obtained in the Medical Department of the University of Texas, Galveston, from which he was graduated in 1913. He then served an internship at Providence Hospital, Waco. After his internship he was house surgeon at Providence Hospital for several years, during which time he organized the clinical laboratory and x-ray department of the hospital. He had been in active practice in Waco for thirty-three years.

DR. CHARLES E. COLLINS

Dr. Collins was throughout his professional life a member of the McLennan County Medical Society, State Medical Association, and American Medical Association. He was a fellow of the American Medical Association and of the American College of Surgeons. He had served McLennan County Society as president, and was a member of the surgical staffs of Providence and Hillcrest Hospitals, Waco, for more than twenty-five years. During World War I he entered the Medical Corps of the U. S. Army as a first lieutenant, spending the greater part of his time on duty with the surgical service at Walter Reed Hospital, Washington, D. C.

Dr. Collins' ingenuity manifested itself early in his professional career. During his service at Walter Reed he removed ureteral calculi by dilating the ureters with over-sized ureteral dilators, considered an unusual procedure at that time by his chief, Dr. F. J. Cotton, of Boston. While Dr. Collins was a general surgeon, he was quite versatile, and was called upon to remove foreign bodies from the stomach and bronchus. In one case he removed a round bead from the bronchus of a child, after a failure to remove it

*An obituary ordinarily will not be published more than four months after date of death. Coöperation by county medical society secretaries, friends, and families of physicians in reporting deaths and in furnishing appropriate biographical material promptly is solicited.

with the ordinary bronchoscope, by passing an operating cystoscope into the bronchus and threading a fine wire through the eye of the bead. He was highly regarded as a diagnostician of unusual ability and a general and urologic surgeon of exceptional skill. During the last ten or fifteen years of life he devoted considerable time to fractures of the neck of the femur, and had devised a screw which he made in his own workshop for these fractures. His one hobby besides untiring work was horseback riding. He had won many blue ribbons in local horse shows with his prized five gaited saddle horse, which he had also taught a sixth gait, referred to by Dr. Collins as his W. P. A. gait. When directed by his master to execute the W. P. A. gait, "Chester," the horse, would barely drag one foot after the other. Considered by his associates as one of the most brilliant men in Texas medicine, Dr. Collins also had a charming and genial personality.

Dr. Collins was married in November, 1919, to Miss Sue Spell, of Hillsboro, who died thirteen months later from fracture of the base of the skull. On February 14, 1929, he was married to Mrs. Gladys Cavitt White, of Holland, Texas. He is survived by his wife and his daughter, Shirley Collins; his mother, Mrs. Emma D. Collins, Dallas; three sisters, Mrs. R. H. Parsons, Waco, and Miss Mary Collins and Mrs. H. A. Hill, Dallas; and three brothers, W. H. Collins, Houston; Dr. L. D. Collins, Waco; and Dr. Joe Collins, Waterbury, Conn.

Dr. Charles Edward Mays, San Angelo, died June 20, 1946, following a long illness.

The son of John Milton and Sarah (Fulbright) Mays, Dr. Mays was born November 15, 1861, near New Salem, Texas. He received his academic education at Trinity University, Waxahachie, and received his doctor of medicine degree from Tulane University, New Orleans, in 1885. He returned to New Salem to begin practice, but within four years moved to Wooten Wells, where he remained for three years before locating in San Angelo, his home the remainder of his life.

DR. CHARLES E. MAYS

Dr. Mays was a member throughout his professional life of the State Medical Association and American Medical Association and in 1933 was elected to honory membership in the State Association. He helped organize and was a charter member of the San Angelo District Medical Society after its organization. He served as president of his county society in 1905. He was a charter member of the First Presbyterian Church, U. S. A., of San Angelo, an elder and a Sunday school teacher and the church treasurer until a short time before his death. He was a Mason and had been made a lifetime honorary member for his services to the organization.

On October 5, 1887, Dr. Mays married Miss Lulu Wiggins at New Salem. He is survived by his wife; a son, C. E. Mays, Jr., Sweetwater; a daughter, Mrs. David J. Murray, San Angelo; and one brother, J. H. Mays, Jacksboro.

Dr. Claud Earnest Watson, Dallas, Texas, died at a hospital there July 21, 1946, following an operation for gallstones and obstruction of the bowels.

Born in Collin County on April 1, 1891, Dr. Watson was the son of Dr. John T. and Sarah (Bass) Watson. He attended Dallas High School, Terrill Preparatory School for Boys in Dallas, and the University of Texas at Austin prior to being graduated from the University of Texas Medical Branch at Galveston in 1919. He was assistant city health officer in Dallas during 1920 and served a one year internship at Parkland Hospital, Dallas. In 1921 he was instructor in physiology at the University of Texas Medical Branch, and then he began practice in Dallas, where he was active the remainder of his life.

DR. CLAUD E. WATSON

From the time of his graduation from medical school, Dr. Watson was a member of the State Medical Association and American Medical Association through Dallas County Medical Society. He was also a Mason and a Shriner, and enjoyed hunting, fishing, painting, and music.

Much of Dr. Watson's professional career was concerned with the diagnosis and treatment of obscure chronic conditions, principally malaria. He pioneered in the use of bismuth violet as a therapeutic agent for malaria, and he and his assistant, O. O. Cook, Ph. G., synthesized a new chemical, protozidin, which Dr. Watson used successfully in the treatment of malaria and similar protozoal diseases. In 1941 he was invited to spend a month in Mexico City to do additional research in malaria and tropical diseases and to demonstrate his method of treating malaria.

Surviving Dr. Watson are his wife, the former Miss Ora Mae Mitchell, whom he married in 1921 in Dallas, and one son, Claud E., Jr., recently returned from military service in France.

Dr. Enoch Jasper Cook died at his home in Monahans on August 7, 1946, after an extended illness.

Born December 27, 1876, at Mount Pleasant, Dr. Cook was the son of Enoch J. and Eliza Cook. He obtained his medical education at the Memphis, Tenn., Hospital Medical College, and returned to Texas about 1898 to practice. He practiced several years each in Titus, Red River, Lynn, and Hockley Counties before moving to what was then Ector County about 1926. He was responsible for planning and drawing up the petition for organizing Crane County from Ector County at that time. In 1931 he moved to Monahans, where he operated the Northside Hospital

until his retirement in 1944. Since that time he had devoted himself to his real estate business.

From 1931 until his retirement in 1944, Dr. Cook held almost continuous membership in the State Medical Association and American Medical Association, first through Crane-Upton-Reagan Counties Medical Society and then through Reeves-Ward-Winkler-Loving-Culberson-Hudspeth Counties Medical Society. He served on the Selective Service Board for two years and was a member of the Baptist Church.

Dr. Cook is survived by the former Miss Jewel Lacy, whom he married October 9, 1944; four sons, Roy B. Cook, Mount Pleasant; Howard G. Cook, Wilson; and Morris Cook and Richard Cook, Lubbock; three daughters; Mrs. Preston Lee, Sweetwater; Mrs. Charles Burns, Corpus Christi; and Mrs. Lucy Skinner, Lubbock; two brothers, Robert Cook and Ed Cook, Mount Pleasant; two sisters, Mrs. Mary Dickson, Fort Worth, and Mrs. T. N. Harris, Mount Pleasant; ten grandchildren; and one great grandchild.

Dr. John Crafford Holman, Franklin, Texas, died of coronary occlusion June 2, 1946, in a Marlin hospital.

Born March 13, 1869, in Winona, Miss., Dr. Holman was the son of Jesse and Elizabeth (Page) Holman. He received his academic education at the University of Texas, Austin, and his medical education at the University of Texas Medical Department, Galveston, and the Hospital College of Medicine, Louisville, Ky. Following his graduation from the latter institution in 1896, he located in Franklin, Texas, and had been in practice there forty-eight years at the time of his death. For forty-four years he was local surgeon for the Missouri Pacific Railway.

DR. JOHN CRAFFORD HOLMAN

Dr. Holman, from the time of his graduation from medical school until 1943, was a member of the State Medical Association and American Medical Association. He was a member of Brazos-Robertson Counties Medical Society. He had served as president and secretary of his county medical society. He was also county and city health officer a number of years. He was a member of the board of stewards of the Franklin Methodist Church for forty-eight years, mayor of Franklin at one time, a member of Knights of Pythias and of Woodmen of the World.

Survivors include Dr. Holman's wife, the former Miss Julia McMillan, whom he married December 21, 1902, in Franklin, and Dr. John Crafford Holman, Jr., San Diego, Calif.

Dr. Quincy Brown Lee, Wichita Falls, Texas, was stricken with coronary occlusion while on a fishing trip in Wyoming and died in a hospital at Jackson, Wyo., following a second attack three days later on August 13, 1946.

Dr. Lee, son of Dr. and Mrs. James Thomas Lee, was born in Parker County, Texas, on March 18, 1888. Shortly after his birth the family moved to Munday, where Dr. Lee received his early education. After being graduated from high school, he attended Polytechnic Institute in Fort Worth and was graduated from the Medical Department of the University of Texas in 1910. He served an internship at John Sealy Hospital, Galveston, and a residency at Southwestern State Hospital, San Antonio. In 1914 he moved to Wichita Falls, where he made his home until his death. He volunteered for service during World War I and saw active duty as a surgeon overseas before being discharged as a major at the close of the war. Upon his return to Wichita Falls Dr. Lee, Dr. O. B. Kiel, and the late Dr. Everett Jones organized the Wichita Falls Medical and Surgical Clinic, which in 1926 became the Wichita Falls Clinic-Hospital. Dr. Lee was chief surgeon of this institution at the time of his death. He was also division surgeon for the Fort Worth and Denver Railroad and for several oil companies.

DR. QUINCY BROWN LEE

From the time of his graduation from medical college Dr. Lee was a member of the State Medical Association and American Medical Association, first through Galveston and Bexar Counties Medical Societies and then through Wichita County Medical Society. He was at one time president of the Wichita County Society and was chairman of Procurement and Assignment Service for Physicians for Wichita County during World War II. He was a fellow of the American College of Surgeons, a member of the founders group of the American Board of Surgery, and a past president of the Texas Surgical Society. He was a member of Phi Chi medical fraternity and of Alpha Omega Alpha medical honor society. Dr. Lee was a member of the board of stewards of the First Methodist Church in Wichita Falls and a charter member of the Wichita Falls Rotary Club, a Mason, and a Shriner.

Dr. Lee was preceded in death by a first wife, the former Miss Genevive Thompson. He is survived by his second wife, the former Miss Marian Lewis, whom he married in June, 1924; two sons, Dr. James T. Lee, Wichita Falls, and Frank J. Lee, who is entering the University of Texas School of Medicine this fall; two daughters, Mrs. Sam Cantey III, Fort Worth, and Miss Marian Lee, Wichita Falls; one brother, Homer Lee, Wichita Falls; three sisters, Miss Shelly Lee and Mrs. Austin Caughran, both of Munday, and Mrs. Ethie P'Pool, Hereford; one grandson; and one granddaughter.